#### 108TH CONGRESS 2D SESSION

# S. 2311

To provide for various energy efficiency programs and tax incentives, and for other purposes.

#### IN THE SENATE OF THE UNITED STATES

APRIL 8, 2004

Ms. Snowe (for herself, Mrs. Feinstein, Mr. Bingaman, and Ms. Cantwell) introduced the following bill; which was read twice and referred to the Committee on Finance

## A BILL

To provide for various energy efficiency programs and tax incentives, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.
- 4 (a) SHORT TITLE.—This Act may be cited as the
- 5 "Efficient Energy Through Certified Technologies and
- 6 Electricity Reliability (EFFECTER) Act of 2004".
- 7 (b) Table of Contents.—The table of contents of
- 8 this Act is as follows:
  - Sec. 1. Short title; table of contents.

- Sec. 101. Energy efficient commercial buildings deduction.
- Sec. 102. Credit for construction of new energy efficient homes.
- Sec. 103. Incentive for certain energy efficient property used in business.
- Sec. 104. Credit for certain nonbusiness energy property.
- Sec. 105. Energy credit for combined heat and power system property.
- Sec. 106. Credit for energy efficient appliances.

#### TITLE II—ENERGY EFFICIENT PRODUCTS

- Sec. 201. Energy conservation standards for additional products.
- Sec. 202. Energy labeling.

#### TITLE III—ENERGY EFFICIENCY FEDERAL PROGRAMS

- Sec. 301. Procurement of energy efficient products.
- Sec. 302. Energy savings performance contracts.
- Sec. 303. Federal building performance standards.

#### TITLE IV—PUBLIC HOUSING

- Sec. 401. Public Housing Capital Fund.
- Sec. 402. Grants for energy-conserving improvements for assisted housing.
- Sec. 403. Energy-efficient appliances.
- Sec. 404. Energy efficiency standards.

#### TITLE V—RELIABILITY STANDARDS

Sec. 501. Electric reliability standards.

### 1 TITLE I—TAX INCENTIVES

- 2 SEC. 101. ENERGY EFFICIENT COMMERCIAL BUILDINGS DE-
- 3 **DUCTION.**
- 4 (a) In General.—Part VI of subchapter B of chap-
- 5 ter 1 of the Internal Revenue Code of 1986 (relating to
- 6 itemized deductions for individuals and corporations) is
- 7 amended by inserting after section 179A the following new
- 8 section:
- 9 "SEC. 179B. ENERGY EFFICIENT COMMERCIAL BUILDINGS
- 10 **DEDUCTION.**
- 11 "(a) IN GENERAL.—There shall be allowed as a de-
- 12 duction an amount equal to the cost of energy efficient

1	commercial building property placed in service during the
2	taxable year.
3	"(b) MAXIMUM AMOUNT OF DEDUCTION.—The de-
4	duction under subsection (a) with respect to any building
5	for the taxable year and all prior taxable years shall not
6	exceed an amount equal to the product of—
7	"(1) \$2.25, and
8	"(2) the square footage of the building.
9	"(c) Definitions.—For purposes of this section—
10	"(1) Energy efficient commercial build-
11	ING PROPERTY.—The term 'energy efficient commer-
12	cial building property' means property—
13	"(A) which is installed on or in any build-
14	ing located in the United States,
15	"(B) which is installed as part of—
16	"(i) the lighting systems,
17	"(ii) the heating, cooling, ventilation,
18	and hot water systems, or
19	"(iii) the building envelope, and
20	"(C) which is certified in accordance with
21	subsection (d)(4) as being installed as part of
22	a plan designed to reduce the total annual en-
23	ergy and power costs with respect to the light-
24	ing systems, heating, cooling, ventilation, and
25	hot water systems of the building by 50 percent

1	or more in comparison to a reference building
2	which meets the minimum requirements of
3	Standard 90.1–2001 using methods of calcula-
4	tion under subsection (d)(2).
5	A building described in subparagraph (A) may in-
6	clude any residential rental property, including any
7	low-rise multifamily structure or single family hous-
8	ing property which is not within the scope of Stand-
9	ard 90.1–2001.
10	"(2) STANDARD 90.1–2001.—The term 'Stand-
11	ard 90.1–2001' means Standard 90.1–2001 of the
12	American Society of Heating, Refrigerating, and Air
13	Conditioning Engineers and the Illuminating Engi-
14	neering Society of North America (as in effect on
15	April 2, 2003).
16	"(d) Special Rules.—
17	"(1) Partial allowance.—
18	"(A) In general.—Except as provided in
19	subsection (f), if—
20	"(i) the requirement of subsection
21	(c)(1)(C) is not met, but
22	"(ii) there is a certification in accord-
23	ance with subsection (d)(4) that any sys-
24	tem referred to in subsection $(c)(1)(B)$ sat-
25	isfies the energy-savings targets estab-

lished by the Secretary under subpara-graph (B) with respect to such system, then the requirement of subsection (c)(1)(C)shall be treated as met with respect to such system, and the deduction under subsection (a) shall be allowed with respect to energy efficient commercial building property installed as part of such system and as part of a plan to meet such targets, except that subsection (b) shall be applied to such property by substituting '\$.75' for '\$2.25'.

- "(B) REGULATIONS.—The Secretary, after consultation with the Secretary of Energy, shall establish a target for each system described in subsection (c)(1)(B) which, if such targets were met for all such systems, the building would meet the requirements of subsection (c)(1)(C).
- "(2) METHODS OF CALCULATION.—The Secretary, after consultation with the Secretary of Energy, shall promulgate regulations which describe in detail methods for calculating and verifying energy and power consumption and cost, based on the provisions of the 2005 California Nonresidential Alternative Calculation Method Approval Manual or, in the case of residential property, the 2005 California

Residential Alternative Calculation Method Approval
Manual. These regulations shall meet the following
requirements:

"(A) In calculating tradeoffs and energy performance, the regulations shall prescribe the costs per unit of energy and power, such as kilowatt hour, kilowatt, gallon of fuel oil, and cubic foot or Btu of natural gas, which may be dependent on time of usage. If a State has developed annual energy usage and cost reduction procedures based on time of usage costs for use in the performance standards of the State's building energy code before the effective date of this section, the State may use those annual energy usage and cost reduction procedures in lieu of those adopted by the Secretary.

- "(B) The calculation methods under this paragraph need not comply fully with section 11 of Standard 90.1–2001.
- "(C) The calculation methods shall be fuel neutral, such that the same energy efficiency features shall qualify a building for the deduction under this section regardless of whether the heating source is a gas or oil furnace or an electric heat pump. The reference building for

1	a proposed design which employs electric resist-
2	ance heating shall be modeled as using a heat
3	pump.
4	"(D) The calculation methods shall provide
5	appropriate calculated energy savings for design
6	methods and technologies not otherwise credited
7	in either Standard 90.1–2001 or in the 2005
8	California Nonresidential Alternative Calcula-
9	tion Method Approval Manual, including the
10	following:
11	"(i) Natural ventilation.
12	"(ii) Evaporative cooling.
13	"(iii) Automatic lighting controls such
14	as occupancy sensors, photocells, and time-
15	clocks.
16	"(iv) Daylighting.
17	"(v) Designs utilizing semi-condi-
18	tioned spaces which maintain adequate
19	comfort conditions without air conditioning
20	or without heating.
21	"(vi) Improved fan system efficiency,
22	including reductions in static pressure.
23	"(vii) Advanced unloading mecha-
24	nisms for mechanical cooling, such as mul-
25	tiple or variable speed compressors.

1	"(viii) The calculation methods may
2	take into account the extent of commis-
3	sioning in the building, and allow the tax-
4	payer to take into account measured per-
5	formance which exceeds typical perform-
6	ance.
7	"(ix) On-site generation of electricity,
8	including combined heat and power sys-
9	tems, fuel cells, and renewable energy gen-
10	eration such as solar energy.
11	"(x) Wiring with lower energy losses
12	than wiring satisfying Standard 90.1–2001
13	requirements for building power distribu-
14	tion systems.
15	"(3) Computer software.—
16	"(A) IN GENERAL.—Any calculation under
17	paragraph (2) shall be prepared by qualified
18	computer software.
19	"(B) Qualified computer software.—
20	For purposes of this paragraph, the term
21	'qualified computer software' means software—
22	"(i) for which the software designer
23	has certified that the software meets all
24	procedures and detailed methods for calcu-

1	lating energy and power consumption and
2	costs as required by the Secretary,
3	"(ii) which provides such forms as re-
4	quired to be filed by the Secretary in con-
5	nection with energy efficiency of property
6	and the deduction allowed under this sec-
7	tion, and
8	"(iii) which provides a notice form
9	which documents the energy efficiency fea-
10	tures of the building and its projected an-
11	nual energy costs.
12	"(4) Allocation of Deduction for Public
13	PROPERTY.—In the case of energy efficient commer-
14	cial building property installed on or in public prop-
15	erty, the Secretary shall promulgate a regulation to
16	allow the allocation of the deduction to the person
17	primarily responsible for designing the property in
18	lieu of the public entity which is the owner of such
19	property. Such person shall be treated as the tax-
20	payer for purposes of this section.
21	"(5) NOTICE TO OWNER.—Each certification
22	required under this section shall include an expla-

1 annual energy costs as provided in the notice under 2 paragraph (3)(B)(iii). 3 "(6) CERTIFICATION.— "(A) IN GENERAL.—The Secretary shall 4 prescribe the manner and method for the mak-6 ing of certifications under this section. 7 "(B) Procedures.—The Secretary shall 8 include as part of the certification process pro-9 cedures for inspection and testing by qualified 10 individuals described in subparagraph (C) to 11 ensure compliance of buildings with energy-sav-12 ings plans and targets. Such procedures shall 13 be comparable, given the difference between 14 commercial and residential buildings, to the re-15 quirements in the Mortgage Industry National Accreditation Procedures for Home Energy 16 17 Rating Systems. 18 "(C) QUALIFIED INDIVIDUALS.—Individ-19 uals qualified to determine compliance shall be 20 only those individuals who are recognized by an 21 organization certified by the Secretary for such 22 purposes. 23 "(e) Basis Reduction.—For purposes of this subtitle, if a deduction is allowed under this section with re-

spect to any energy efficient commercial building property,

1	the basis of such property shall be reduced by the amount
2	of the deduction so allowed.
3	"(f) Interim Rules for Lighting Systems.—
4	Until such time as the Secretary issues final regulations
5	under subsection (d)(1)(B) with respect to property which
6	is part of a lighting system—
7	"(1) In general.—The lighting system target
8	under subsection $(d)(1)(A)(ii)$ shall be a reduction in
9	lighting power density of 25 percent (50 percent in
10	the case of a warehouse) of the minimum require-
11	ments in Table 9.3.1.1 or Table 9.3.1.2 (not includ-
12	ing additional interior lighting power allowances) of
13	Standard 90.1–2001.
14	"(2) Reduction in Deduction if Reduction
15	LESS THAN 40 PERCENT.—
16	"(A) IN GENERAL.—If, with respect to the
17	lighting system of any building other than a
18	warehouse, the reduction in lighting power den-
19	sity of the lighting system is not at least 40
20	percent, only the applicable percentage of the
21	amount of deduction otherwise allowable under
22	this section with respect to such property shall
23	be allowed.
24	"(B) APPLICABLE PERCENTAGE.—For
25	purposes of subparagraph (A), the applicable

1	percentage is the number of percentage points
2	(not greater than 100) equal to the sum of—
3	"(i) 50, and
4	"(ii) the amount which bears the same
5	ratio to 50 as the excess of the reduction
6	of lighting power density of the lighting
7	system over 25 percentage points bears to
8	15.
9	"(C) Exceptions.—This subsection shall
10	not apply to any system—
11	"(i) the controls and circuiting of
12	which do not comply fully with the manda-
13	tory and prescriptive requirements of
14	Standard 90.1–2001 and which do not in-
15	clude provision for bilevel switching in all
16	occupancies except hotel and motel guest
17	rooms, store rooms, restrooms, and public
18	lobbies, or
19	"(ii) which does not meet the min-
20	imum requirements for calculated lighting
21	levels as set forth in the Illuminating Engi-
22	neering Society of North America Lighting
23	Handbook, Performance and Application,
24	Ninth Edition, 2000.

1	"(g) Regulations.—The Secretary shall promul-
2	gate such regulations as necessary—
3	"(1) to take into account new technologies re-
4	garding energy efficiency and renewable energy for
5	purposes of determining energy efficiency and sav-
6	ings under this section, and
7	"(2) to provide for a recapture of the deduction
8	allowed under this section if the plan described in
9	subsection $(e)(1)(C)$ or $(d)(1)(A)$ is not fully imple-
10	mented.
11	"(h) TERMINATION.—This section shall not apply
12	with respect to property placed in service after December
13	31, 2009.".
14	(b) Conforming Amendments.—
15	(1) Section 1016(a) of the Internal Revenue
16	Code of 1986 is amended by striking "and" at the
17	
	end of paragraph (27), by striking the period at the
18	end of paragraph (27), by striking the period at the end of paragraph (28) and inserting ", and", and by
18 19	
	end of paragraph (28) and inserting ", and", and by
19	end of paragraph (28) and inserting ", and", and by adding at the end the following new paragraph:
19 20	end of paragraph (28) and inserting ", and", and by adding at the end the following new paragraph:  "(29) to the extent provided in section
19 20 21	end of paragraph (28) and inserting ", and", and by adding at the end the following new paragraph:  "(29) to the extent provided in section 179B(e).".

1	(3) Section 1250(b)(3) of such Code is amend-
2	ed by inserting before the period at the end of the
3	first sentence "or by section 179B".
4	(4) Section 263(a)(1) of such Code is amended
5	by striking "or" at the end of subparagraph (G), by
6	striking the period at the end of subparagraph (H)
7	and inserting ", or", and by inserting after subpara-
8	graph (H) the following new subparagraph:
9	"(I) expenditures for which a deduction is
10	allowed under section 179B.".
11	(5) Section 312(k)(3)(B) of such Code is
12	amended by striking "or 179A" each place it ap-
13	pears in the heading and text and inserting ", 179A,
14	or 179B".
15	(c) CLERICAL AMENDMENT.—The table of sections
16	for part VI of subchapter B of chapter 1 of the Internal
17	Revenue Code of 1986 is amended by inserting after sec-
18	tion 179A the following new item:
	"Sec. 179B. Energy efficient commercial buildings deduction.".
19	(d) Effective Date.—The amendments made by
20	this section shall apply to property placed in service after
21	the date of the enactment of this Act in taxable years end-

22 ing after such date.

1	SEC. 102. CREDIT FOR CONSTRUCTION OF NEW ENERGY EF-
2	FICIENT HOMES.
3	(a) In General.—Subpart D of part IV of sub-
4	chapter A of chapter 1 of the Internal Revenue Code of
5	1986 (relating to business related credits) is amended by
6	adding at the end the following new section:
7	"SEC. 45G. NEW ENERGY EFFICIENT HOME CREDIT.
8	"(a) In General.—For purposes of section 38, in
9	the case of an eligible contractor with respect to a quali-
10	fied new energy efficient home, the credit determined
11	under this section for the taxable year with respect to such
12	home is an amount equal to the aggregate adjusted bases
13	of all energy efficient property installed in such home dur-
14	ing construction of such home.
15	"(b) Limitations.—
16	"(1) Maximum credit.—
17	"(A) IN GENERAL.—The credit allowed by
18	this section with respect to a dwelling unit shall
19	not exceed—
20	"(i) in the case of a dwelling unit de-
21	scribed in clause (i) or (iii) of subsection
22	(e)(3)(C), \$1,000, and
23	"(ii) in the case of a dwelling unit de-
24	scribed in subsection $(e)(3)(C)(ii)$ , \$2,000.
25	"(B) Prior credit amounts on same
26	DWELLING UNIT TAKEN INTO ACCOUNT —If a

1	credit was allowed under subsection (a) with re-
2	spect to a dwelling unit in 1 or more prior tax-
3	able years, the amount of the credit otherwise
4	allowable for the taxable year with respect to
5	such dwelling unit shall be reduced by the sum
6	of the credits allowed under subsection (a) with
7	respect to the dwelling unit for all prior taxable
8	years.
9	"(2) Coordination with certain credits.—
10	For purposes of this section—
11	"(A) the basis of any property referred to
12	in subsection (a) shall be reduced by that por-
13	tion of the basis of any property which is attrib-
14	utable to qualified rehabilitation expenditures
15	(as defined in section $47(c)(2)$ ) or to the energy
16	percentage of energy property (as determined
17	under section 48(a)), and
18	"(B) expenditures taken into account
19	under section 47 or 48(a) shall not be taken
20	into account under this section.
21	"(c) Definitions.—For purposes of this section—
22	"(1) Eligible contractor.—The term 'eligi-
23	ble contractor' means—
24	"(A) the person who constructed the quali-
25	fied new energy efficient home, or

1	"(B) in the case of a qualified new energy
2	efficient home which is a manufactured home,
3	the manufactured home producer of such home.
4	If more than 1 person is described in subparagraph
5	(A) or (B) with respect to any qualified new energy
6	efficient home, such term means the person des-
7	ignated as such by the owner of such home.
8	"(2) Energy efficient property.—The
9	term 'energy efficient property' means any energy
10	efficient building envelope component, and any en-
11	ergy efficient heating or cooling equipment or sys-
12	tem, which can, individually or in combination with
13	other components, result in a dwelling unit meeting
14	the requirements of this section.
15	"(3) Qualified New Energy efficient
16	HOME.—The term 'qualified new energy efficient
17	home' means a dwelling unit—
18	"(A) located in the United States,
19	"(B) the construction of which is substan-
20	tially completed after December 31, 2003, and
21	"(C) which is—
22	"(i) certified to have a level of annual
23	heating and cooling energy consumption
24	which is at least 30 percent below the an-
25	nual level of heating and cooling energy

1	consumption of a comparable dwelling unit
2	constructed in accordance with the stand-
3	ards of chapter 4 of the 2003 International
4	Energy Conservation Code, as such Code
5	(including supplements) is in effect on the
6	date of the enactment of this section, and
7	for which the heating and cooling equip-
8	ment efficiencies correspond to the min-
9	imum allowed under the regulations estab-
10	lished by the Department of Energy pursu-
11	ant to the National Appliance Energy Con-
12	servation Act of 1987 and in effect at the
13	time of construction, and to have building
14	envelope component improvements account
15	for at least ½ of such 30 percent,
16	"(ii) certified to have a level of annual
17	heating and cooling energy consumption
18	which is at least 50 percent below such an-
19	nual level and to have building envelope
20	component improvements account for at
21	least $\frac{1}{5}$ of such 50 percent, or
22	"(iii) a manufactured home which—
23	"(I) conforms to Federal Manu-
24	factured Home Construction and
25	Safety Standards (section 3280 of

1	title 24, Code of Federal Regulations),
2	and
3	"(II) meets the applicable stand-
4	ards required by the Administrator of
5	the Environmental Protection Agency
6	under the Energy Star Labeled
7	Homes program.
8	"(4) Construction.—The term 'construction'
9	includes substantial reconstruction and rehabilita-
10	tion.
11	"(5) Acquire.—The term 'acquire' includes
12	purchase and, in the case of reconstruction and re-
13	habilitation, such term includes a binding written
14	contract for such reconstruction or rehabilitation.
15	"(6) Building envelope component.—The
16	term 'building envelope component' means—
17	"(A) any insulation material or system
18	which is specifically and primarily designed to
19	reduce the heat loss or gain of a dwelling unit
20	when installed in or on such dwelling unit,
21	"(B) exterior windows (including sky-
22	lights),
23	"(C) exterior doors, and

1	"(D) any metal roof installed on a dwelling
2	unit, but only if such roof has appropriate pig-
3	mented coatings which—
4	"(i) are specifically and primarily de-
5	signed to reduce the heat gain of such
6	dwelling unit, and
7	"(ii) meet the Energy Star program
8	requirements.
9	"(d) Certification.—
10	"(1) METHOD OF CERTIFICATION.—A certifi-
11	cation described in subsection (c)(3)(C) shall be de-
12	termined in accordance with guidance prescribed by
13	the Secretary, after consultation with the Secretary
14	of Energy. Such guidance shall specify procedures
15	and methods for calculating energy and cost savings.
16	"(2) Form.—A certification described in sub-
17	section (c)(3)(C) shall be made in writing—
18	"(A) in a manner which specifies in readily
19	verifiable fashion the energy efficient building
20	envelope components and energy efficient heat-
21	ing or cooling equipment installed and their re-
22	spective rated energy efficiency performance,
23	and
24	"(B) in the case of a qualified new energy
25	efficient home which is a manufactured home,

- 1 accompanied by such documentation as required
- 2 by the Administrator of the Environmental Pro-
- 3 tection Agency under the Energy Star Labeled
- 4 Homes program.
- 5 "(e) Basis Adjustment.—For purposes of this sub-
- 6 title, if a credit is determined under this section for any
- 7 expenditure with respect to any property, the increase in
- 8 the basis of such property which would (but for this sub-
- 9 section) result from such expenditure shall be reduced by
- 10 the amount of the credit so determined.
- 11 "(f) Application of Section.—Subsection (a) shall
- 12 apply to qualified new energy efficient homes acquired
- 13 during the period beginning on January 1, 2004, and end-
- 14 ing on December 31, 2006.".
- 15 (b) Credit Made Part of General Business
- 16 CREDIT.—Section 38(b) of the Internal Revenue Code of
- 17 1986 (relating to current year business credit) is amended
- 18 by striking "plus" at the end of paragraph (14), by strik-
- 19 ing the period at the end of paragraph (15) and inserting
- 20 ", plus", and by adding at the end the following new para-
- 21 graph:
- 22 "(16) the new energy efficient home credit de-
- termined under section 45G(a).".
- 24 (c) Basis Adjustment.—Subsection (a) of section
- 25 1016 of the Internal Revenue Code of 1986, as amended

- 1 by section 101, is amended by striking "and" at the end
- 2 of paragraph (28), by striking the period at the end of
- 3 paragraph (29) and inserting ", and", and by adding at
- 4 the end the following new paragraph:
- 5 "(30) to the extent provided in section 45G(e),
- 6 in the case of amounts with respect to which a credit
- 7 has been allowed under section 45G.".
- 8 (d) Limitation on Carryback.—Section 39(d) of
- 9 the Internal Revenue Code of 1986 (relating to transition
- 10 rules) is amended by adding at the end the following new
- 11 paragraph:
- 12 "(11) NO CARRYBACK OF NEW ENERGY EFFI-
- 13 CIENT HOME CREDIT BEFORE EFFECTIVE DATE.—
- No portion of the unused business credit for any
- taxable year which is attributable to the new energy
- 16 efficient home credit determined under section
- 17 45G(a) may be carried to a taxable year beginning
- 18 before January 1, 2004.".
- 19 (e) Deduction for Certain Unused Business
- 20 Credits.—Section 196(c) of the Internal Revenue Code
- 21 of 1986 (defining qualified business credits) is amended
- 22 by striking "and" at the end of paragraph (10), by strik-
- 23 ing the period at the end of paragraph (11) and inserting
- 24 ", and", and by adding after paragraph (11) the following
- 25 new paragraph:

1	"(12) the new energy efficient home credit de-
2	termined under section 45G(a).".
3	(f) CLERICAL AMENDMENT.—The table of sections
4	for subpart D of part IV of subchapter A of chapter 1
5	of the Internal Revenue Code of 1986 is amended by add-
6	ing at the end the following new item:
	"Sec. 45G. New energy efficient home credit.".
7	(g) Effective Date.—The amendments made by
8	this section shall apply to taxable years ending after De-
9	cember 31, 2003.
10	SEC. 103. INCENTIVE FOR CERTAIN ENERGY EFFICIENT
11	PROPERTY USED IN BUSINESS.
12	(a) In General.—Part VI of subchapter B of chap-
13	ter 1 of the Internal Revenue Code of 1986 is amended
14	by adding at the end the following new section:
15	"SEC. 199. ENERGY PROPERTY DEDUCTION.
16	"(a) In General.—There shall be allowed as a de-
17	duction for the taxable year an amount equal to the sum
18	of—
19	"(1) the amount determined under subsection
20	(b) for each energy property of the taxpayer placed
21	in service during such taxable year, and
22	"(2) the energy efficient residential rental
23	building property deduction determined under sub-
24	section (e).

"(b) Amount for Energy Property.—

"(1) IN GENERAL.—The amount determined under this subsection for the taxable year for each item of energy property shall equal the amount specified for such property in the following table:

Description of property:	Allowable amount is:	
Elected solar hot water property	\$1.00 per each kwh/year of sav-	
Photovoltaic property	ings. \$4.50 per peak watt.	
Advanced main air circulating fan or a Tier 1 natural gas, propane, or oil water heater.	\$150.	
Tier 2 energy-efficient building property	\$900.	
Tier 1 energy-efficient building property (other than an advanced main air circulating fan or a natural gas, propane, or oil water heater).	\$450.	

- 5 "(2) ELECTED SOLAR HOT WATER PROP-6 ERTY.—In the case of elected solar hot water prop-7 erty, the taxpayer may elect to substitute '\$21 per 8 annual Therm of natural gas savings' for '\$1.00 per 9 each kwh/year of savings' in the table contained in 10 paragraph (1).
- 11 "(c) Energy Property Defined.—
- "(1) IN GENERAL.—For purposes of this part,
  the term 'energy property' means any property—
- 14 "(A) which is—
- 15 "(i) solar energy property,
- 16 "(ii) Tier 2 energy-efficient building
- 17 property, or
- 18 "(iii) Tier 1 energy-efficient building
- 19 property,

1	"(B)(i) the construction, reconstruction, or
2	erection of which is completed by the taxpayer,
3	or
4	"(ii) which is acquired by the taxpayer if
5	the original use of such property commences
6	with the taxpayer,
7	"(C) with respect to which depreciation (or
8	amortization in lieu of depreciation) is allow-
9	able, and
10	"(D) which meets the performance and
11	quality standards, and the certification require-
12	ments (if any), which—
13	"(i) have been prescribed by the Sec-
14	retary by regulations (after consultation
15	with the Secretary of Energy or the Ad-
16	ministrator of the Environmental Protec-
17	tion Agency, as appropriate),
18	"(ii) in the case of the energy effi-
19	ciency ratio (EER) for central air condi-
20	tioners and electric heat pumps—
21	"(I) require measurements to be
22	based on published data which is test-
23	ed by manufacturers at 95 degrees
24	Fahrenheit, and

1	"(II) do not require ratings to be
2	based on certified data of the Air
3	Conditioning and Refrigeration Insti-
4	tute,
5	"(iii) in the case of geothermal heat
6	pumps—
7	"(I) shall be based on testing
8	under the conditions of ARI/ISO
9	Standard 13256–1 for Water Source
10	Heat Pumps or ARI 870 for Direct
11	Expansion GeoExchange Heat Pumps
12	(DX), as appropriate, and
13	"(II) shall include evidence that
14	water heating services have been pro-
15	vided through a desuperheater or inte-
16	grated water heating system con-
17	nected to the storage water heater
18	tank, and
19	"(iv) are in effect at the time of the
20	acquisition of the property.
21	"(2) Solar energy property.—In the case
22	of—
23	"(A) elected solar hot water property, the
24	regulations under paragraph $(1)(D)$ shall be
25	based on the OG-300 Standard for the Annual

1	Performance of OG-300 Certified Systems of
2	the Solar Rating and Certification Corporation,
3	and
4	"(B) photovoltaics, such regulations shall
5	be based on the ASTM Standard E 1036 and
6	E 1036M-96 Standard Test Method for Elec-
7	tric Performance of Nonconcentrator Terres-
8	trial Photovoltaic Modules and Arrays Using
9	Reference Cells,
10	to the extent the Secretary determines such stand-
11	ards carry out the purposes of this section.
12	"(3) Exception.—Such term shall not include
13	any property which is public utility property (as de-
14	fined in section $46(f)(5)$ as in effect on the day be-
15	fore the date of the enactment of the Revenue Rec-
16	onciliation Act of 1990).
17	"(d) Definitions Relating to Types of Energy
18	Property.—For purposes of this section—
19	"(1) Solar energy property.—
20	"(A) IN GENERAL.—The term 'solar en-
21	ergy property' means equipment which uses
22	solar energy—
23	"(i) to generate electricity, or
24	"(ii) to provide hot water for use in a
25	structure.

1	"(B) ELECTED SOLAR HOT WATER PROP-
2	ERTY.—
3	"(i) In general.—The term 'elected
4	solar hot water property' means property
5	which is solar energy property by reason of
6	subparagraph (A)(ii) and for which an
7	election under this subparagraph is in ef-
8	fect.
9	"(ii) Election.—For purposes of
10	clause (i), a taxpayer may elect to treat
11	property described in clause (i) as elected
12	solar hot water property.
13	"(C) PHOTOVOLTAIC PROPERTY.—The
14	term 'photovoltaic property' means solar energy
15	property which uses a solar photovoltaic process
16	to generate electricity.
17	"(D) SWIMMING POOLS, ETC., USED AS
18	STORAGE MEDIUM.—The term 'solar energy
19	property' shall not include a swimming pool,
20	hot tub, or any other energy storage medium
21	which has a function other than the function of
22	such storage.
23	"(E) Solar panels.—No solar panel or
24	other property installed as a roof (or portion
25	thereof) shall fail to be treated as solar energy

1	property solely because it constitutes a struc-
2	tural component of the structure on which it is
3	installed.
4	"(2) Tier 2 energy-efficient building
5	PROPERTY.—The term 'Tier 2 energy-efficient build-
6	ing property' means—
7	"(A) an electric heat pump water heater
8	which yields an energy factor of at least 2.0 in
9	the standard Department of Energy test proce-
10	dure,
11	"(B) an electric heat pump which has a
12	heating seasonal performance factor (HSPF) of
13	at least 9, a seasonal energy efficiency ratio
14	(SEER) of at least 15, and an energy efficiency
15	ratio (EER) of at least 12.5,
16	"(C) a geothermal heat pump which—
17	"(i) in the case of a closed loop prod-
18	uct, has an energy efficiency ratio (EER)
19	of at least 14.1 and a heating coefficient of
20	performance (COP) of at least 3.3,
21	"(ii) in the case of an open loop prod-
22	uct, has an energy efficiency ratio (EER)
23	of at least 16.2 and a heating coefficient of
24	performance (COP) of at least 3.6, and

1	"(iii) in the case of a direct expansion
2	(DX) product, has an energy efficiency
3	ratio (EER) of at least 15 and a heating
4	coefficient of performance (COP) of at
5	least 3.5,
6	"(D) a central air conditioner which has a
7	seasonal energy efficiency ratio (SEER) of at
8	least 15 and an energy efficiency ratio (EER)
9	of at least 12.5, and
10	"(E) a natural gas, propane, or oil water
11	heater which has an energy factor of at least
12	0.80.
13	"(3) Tier 1 energy-efficient building
14	PROPERTY.—The term 'Tier 1 energy-efficient build-
15	ing property' means—
16	"(A) an electric heat pump which has a
17	heating system performance factor (HSPF) of
18	at least 7.5, a cooling seasonal energy efficiency
19	ratio (SEER) of at least 13.5, and an energy
20	efficiency ratio (EER) of at least 11.5,
21	"(B) a central air conditioner which has a
22	cooling seasonal energy efficiency ratio (SEER)
23	of at least 13.5 and an energy efficiency ratio
24	(EER) of at least 11.5.

1	"(C) a natural gas, propane, or oil water
2	heater which has an energy factor of at least
3	0.65,  and
4	"(D) an oil, natural gas, or propane fur-
5	nace or hot water boiler which achieves at least
6	95 percent annual fuel utilization efficiency
7	(AFUE).
8	"(4) Advanced main air circulating fan.—
9	The term 'advanced main air circulating fan' means
10	a fan used in a natural gas, propane, or oil furnace
11	originally placed in service by the taxpayer during
12	the taxable year, including a fan which uses a
13	brushless permanent magnet motor or another type
14	of motor which achieves similar or higher efficiency
15	at full and half speed, as determined by the Sec-
16	retary.
17	"(e) Energy Efficient Residential Rental
18	BUILDING PROPERTY DEDUCTION.—
19	"(1) Deduction allowed.—For purposes of
20	subsection (a)—
21	"(A) In general.—The energy efficient
22	residential rental building property deduction
23	determined under this subsection is an amount
24	equal to energy efficient residential rental build-

1	ing property expenditures made by a taxpayer
2	for the taxable year.
3	"(B) MAXIMUM AMOUNT OF DEDUC-
4	TION.—The amount of energy efficient residen-
5	tial rental building property expenditures taken
6	into account under subparagraph (A) with re-
7	spect to each dwelling unit shall not exceed—
8	"(i) \$6,000 in the case of a percent-
9	age reduction of 50 percent as determined
10	under paragraph (2)(B), and
11	"(ii) \$12,000 times the percentage re-
12	duction in the case of a percentage reduc-
13	tion of less than 50 percent as determined
14	under paragraph (2)(B).
15	"(C) YEAR DEDUCTION ALLOWED.—The
16	deduction under subparagraph (A) shall be al-
17	lowed in the taxable year in which the construc-
18	tion, reconstruction, erection, or rehabilitation
19	of the property is completed.
20	"(2) Energy efficient residential rental
21	BUILDING PROPERTY EXPENDITURES.—For pur-
22	poses of this subsection—
23	"(A) IN GENERAL.—The term 'energy effi-
24	cient residential rental building property ex-
25	penditures' means an amount paid or incurred

1	in connection with construction, reconstruction,
2	erection, or rehabilitation of energy efficient res-
3	idential rental building property—
4	"(i) for which depreciation is allow-
5	able under section 167,
6	"(ii) which is located in the United
7	States, and
8	"(iii) the construction, reconstruction,
9	erection, or rehabilitation of which is com-
10	pleted by the taxpayer.
11	Such term includes expenditures for labor costs
12	properly allocable to the onsite preparation, as-
13	sembly, or original installation of the property.
14	"(B) Energy efficient residential
15	RENTAL BUILDING PROPERTY.—
16	"(i) In general.—The term 'energy
17	efficient residential rental building prop-
18	erty' means any property which reduces
19	total annual energy and power costs with
20	respect to heating and cooling of the build-
21	ing by a percentage certified according to
22	clause (ii).
23	"(ii) Procedures.—
24	"(I) IN GENERAL.—For purposes
25	of clause (i), energy usage and costs

1	shall be demonstrated by perform-
2	ance-based compliance.
3	"(II) Performance-based com-
4	PLIANCE.—Performance-based compli-
5	ance shall be demonstrated by calcu-
6	lating the percent energy cost savings
7	for heating and cooling, as applicable
8	with respect to a dwelling unit when
9	compared to the original condition of
10	the dwelling unit.
11	"(III) Computer software.—
12	Computer software shall be used in
13	support of performance-based compli-
14	ance under subclause (II) and such
15	software shall meet all of the proce-
16	dures and methods for calculating en-
17	ergy savings reductions which are pro-
18	mulgated by the Secretary of Energy.
19	Such regulations on the specifications
20	for software and verification protocols
21	shall be based on the 2005 California
22	Residential Alternative Calculation
23	Method Approval Manual.
24	"(IV) CALCULATION REQUIRE-
25	MENTS.—In calculating tradeoffs and

1	energy performance, the regulations
2	prescribed under this clause shall pre-
3	scribe for the taxable year the costs
4	per unit of energy and power, such as
5	kilowatt hour, kilowatt, gallon of fuel
6	oil, and cubic foot or Btu of natural
7	gas, which may be dependent on time
8	of usage. Where a State has developed
9	annual energy usage and cost reduc-
10	tion procedures based on time of
11	usage costs for use in the performance
12	standards of the State's building en-
13	ergy code prior to the effective date of
14	this section, the State may use those
15	annual energy usage and cost reduc-
16	tion procedures in lieu of those adopt-
17	ed by the Secretary.
18	"(V) APPROVAL OF SOFTWARE
19	SUBMISSIONS.—The Secretary shall
20	approve software submissions which
21	comply with the requirements of sub-
22	clause (III).
23	"(VI) PROCEDURES FOR INSPEC-
24	TION AND TESTING OF HOMES.—The
25	Secretary shall ensure that procedures

1	for the inspection and testing for com-
2	pliance comply with the calculation re-
3	quirements under subclause (IV) of
4	this clause and clause (iv).
5	"(iii) Determinations of compli-
6	ANCE.—A determination of compliance
7	with respect to energy efficient residential
8	rental building property made for the pur-
9	poses of this subparagraph shall be filed
10	with the Secretary not later than 1 year
11	after the date of such determination and
12	shall include the TIN of the certifier, the
13	address of the building in compliance, and
14	the identity of the person for whom such
15	determination was performed. Determina-
16	tions of compliance filed with the Secretary
17	shall be available for inspection by the Sec-
18	retary of Energy.
19	"(iv) Compliance.—
20	"(I) IN GENERAL.—The Sec-
21	retary, after consultation with the
22	Secretary of Energy, shall establish
23	requirements for certification and
24	compliance procedures after exam-

ining the requirements for energy con-

1	sultants and home energy ratings pro-
2	viders specified by the Mortgage In-
3	dustry National Home Energy Rating
4	Standards.
5	"(II) Individuals qualified
6	TO DETERMINE COMPLIANCE.—The

determination of compliance may be provided by a local building regulatory authority, a utility, a manufactured home production inspection primary inspection agency (IPIA), or an accredited home energy rating system provider. All providers shall be accredited, or otherwise authorized to use

"(C) Allocation of Deduction for Public Property.—In the case of energy efficient residential rental building property which is public property, the Secretary shall promulgate a regulation to allow the allocation of the deduction to the person primarily responsible for designing the improvements to the property in lieu of the public entity which is the owner

approved energy performance meas-

urement methods, by the Residential

Energy Services Network (RESNET).

1	of such property. Such person shall be treated
2	as the taxpayer for purposes of this subsection.
3	"(f) Special Rules.—For purposes of this sec-
4	tion—
5	"(1) Basis reduction.—For purposes of this
6	subtitle, if a deduction is allowed under this section
7	with respect to any property, the basis of such prop-
8	erty shall be reduced by the amount of the deduction
9	so allowed.
10	"(2) Double Benefit.—Property which
11	would, but for this paragraph, be eligible for deduc-
12	tion under more than one provision of this section
13	shall be eligible only under one such provision, the
14	provision specified by the taxpayer.
15	"(g) Regulations.—The Secretary shall promul-
16	gate such regulations as necessary to take into account
17	new technologies regarding energy efficiency and renew-
18	able energy for purposes of determining energy efficiency
19	and savings under this section.
20	"(h) TERMINATION.—This section shall not apply
21	with respect to—
22	"(1) any energy property placed in service after
23	December 31, 2008 (December 31, 2005, in the case
24	of Tier 1 energy-efficient building property), and

1	"(2) any energy efficient residential rental
2	building property expenditures in connection with
3	property—
4	"(A) placed in service after December 31,
5	2007, or
6	"(B) the construction, reconstruction, erec-
7	tion, or rehabilitation of which is not completed
8	on or before December 31, 2007.".
9	(b) Conforming Amendments.—
10	(1) Section 48(a)(3)(A) of the Internal Revenue
11	Code of 1986 is amended to read as follows:
12	"(A) which is equipment used to produce,
13	distribute, or use energy derived from a geo-
14	thermal deposit (within the meaning of section
15	613(e)(2)), but only, in the case of electricity
16	generated by geothermal power, up to (but not
17	including) the electrical transmission stage,".
18	(2) Subparagraph (B) of section 168(e)(3) of
19	such Code is amended—
20	(A) in clause (vi)(I)—
21	(i) by striking "section 48(a)(3)" and
22	inserting "section 199(d)(1)", and
23	(ii) by striking "clause (i)" and in-
24	serting "such subparagraph (A)", and

- 1 (B) in the last sentence, by striking "sec-
- 2 tion 48(a)(3)" and inserting "section
- 199(c)(3)".
- 4 (3) Section 1016(a) of such Code, as amended
- 5 by section 102, is amended by striking "and" at the
- 6 end of paragraph (29), by striking the period at the
- 7 end of paragraph (30) and inserting ", and", and by
- 8 inserting the following new paragraph:
- 9 "(31) for amounts allowed as a deduction under
- 10 section 199(a).".
- 11 (c) Clerical Amendment.—The table of sections
- 12 for part VI of subchapter B of chapter 1 of the Internal
- 13 Revenue Code of 1986 is amended by adding at the end
- 14 the following new item:

"Sec. 199. Energy property deduction.".

- 15 (d) AUTHORIZATION OF APPROPRIATIONS.—There
- 16 are authorized to be appropriated to the Department of
- 17 Energy out of amounts not already appropriated such
- 18 sums as necessary to carry out this section.
- (e) Effective Date.—The amendments made by
- 20 this section shall apply to taxable years beginning after
- 21 December 31, 2003.
- 22 SEC. 104. CREDIT FOR CERTAIN NONBUSINESS ENERGY
- PROPERTY.
- 24 (a) IN GENERAL.—Subpart A of part IV of sub-
- 25 chapter A of chapter 1 of the Internal Revenue Code of

1	1986 (relating to nonrefundable personal credits) is
2	amended by inserting after section 25B the following new
3	section:
4	"SEC. 25C. NONBUSINESS ENERGY PROPERTY.
5	"(a) Allowance of Credit.—
6	"(1) In general.—In the case of an indi-
7	vidual, there shall be allowed as a credit against the
8	tax imposed by this chapter for the taxable year an
9	amount equal to the sum of—
10	"(A) the amount determined under sub-
11	section (b) for each qualified energy property of
12	the taxpayer placed in service during such tax-
13	able year, and
14	"(B) so much of the credit amount speci-
15	fied in paragraph (2) which does not exceed the
16	expenditures made by the taxpayer in connec-
17	tion with the construction, reconstruction, erec-
18	tion, or rehabilitation of a dwelling unit of the
19	taxpayer which results in the unit being a high-
20	ly energy-efficient principal residence.
21	For purposes of subparagraph (B), the expenditures
22	may include labor costs properly allocable to the on-
23	site preparation, assembly, or original installation of
24	such property.

1	"(2) Credit amount.—The credit amount
2	with respect to a highly energy-efficient principal
3	residence is—
4	"(A) \$2,000 in the case of a percentage re-
5	duction of 50 percent as determined under sub-
6	section (c)(6)(A)(iii), and
7	"(B) \$4,000 times the percentage reduc-
8	tion in the case of a percentage reduction of
9	less than 50 percent as determined under sub-
10	section (c)(6)(A)(iii).
11	"(b) Amount for Qualified Energy Prop-
12	ERTY.—
13	"(1) Residential energy property ex-
14	PENDITURES.—Except as provided in paragraph (2),
15	the amount determined under this subsection for the
16	taxable year for each item of qualified energy prop-
17	erty shall equal the amount of residential energy
18	property expenditures made by the taxpayer with re-
19	spect to such property during such taxable year.
20	"(2) Solar hot water property; photo-
21	VOLTAIC PROPERTY.—
22	"(A) IN GENERAL.—In the case of solar
23	hot water property and photovoltaic property,
24	the amount determined under this subsection
25	for the taxable year shall equal the amount

specified for such property in the following table:

Description of property:	Allowable amount is:
Elected solar hot water property	35¢ per each kwh/year of sav-
Photovoltaic property	ings. \$1.50 per peak watt.

"(B) ELECTED SOLAR HOT WATER PROP-ERTY.—In the case of elected solar hot water property (as defined in section 199(d)(1)(B)), the taxpayer may elect to substitute '\$7 per annual Therm of natural gas savings' for '35¢ per each kwh/year of savings' in the table contained in subparagraph (A).

"(3) MAXIMUM AMOUNT.—In the case of property described in the following table, the amount of expenditures taken into account under paragraph (1) and the amount determined under paragraph (2) for the taxable year for each item of qualified energy property with respect to a dwelling unit shall not exceed the amount specified for such property in such table:

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"Description of property item:	Maximum allowable credit amount is:
Solar hot water property	\$1,000.
Photovoltaic property	\$6,000.

"(c) Definitions and Special Rules.—For pur-1 poses of this section— 3 "(1) Residential energy property ex-4 PENDITURES.—The term 'residential energy prop-5 erty expenditures' means expenditures made by the 6 taxpayer for qualified energy property installed on or 7 in connection with a dwelling unit which— "(A) is located in the United States, and 8 9 "(B) is used as a principal residence. 10 Such term includes expenditures for labor costs 11 properly allocable to the onsite preparation, assem-12 bly, or original installation of the property. 13 "(2) Qualified energy property.— "(A) IN GENERAL.—The term 'qualified 14 energy property' means— 15 "(i) energy-efficient building property, 16 17 "(ii) solar hot water property, and 18 "(iii) photovoltaic property. "(B) SWIMMING POOL, ETC., USED AS 19 20 STORAGE MEDIUM; SOLAR PANELS.—For pur-21 poses of this paragraph, the provisions of sub-22 paragraphs (D) and (E) section 199(d)(1) shall 23 apply.

1	"(C) REQUIRED STANDARDS.—Property
2	described under subparagraph (A) shall meet
3	the performance and quality standards and cer-
4	tification standards of paragraphs (1)(D) and
5	(2) of section 199(c).
6	"(3) Energy-efficient building prop-
7	ERTY.—The term 'energy-efficient building property
8	has the same meaning given the terms 'Tier 2 en-
9	ergy-efficient property', 'Tier 1 energy-efficient
10	property', and 'advanced main air circulating fan' in
11	paragraphs (2), (3), and (4) of section 199(d), re-
12	spectively.
13	"(4) Solar hot water property.—The term
14	'solar hot water property' means property which
15	when installed in connection with a structure, uses
16	solar energy for the purpose of providing hot water
17	for use within such structure and the performance
18	of which is determined in accordance with section
19	199(c)(2)(A).
20	"(5) Photovoltaic property.—The term
21	'photovoltaic property' has the same meaning given
22	such term in section 199(d)(1)(C).
23	"(6) Highly energy-efficient principal

RESIDENCE.—

1	"(A) In General.—Property is a highly
2	energy-efficient principal residence if—
3	"(i) such property is located in the
4	United States,
5	"(ii) the property is used as a prin-
6	cipal residence, and
7	"(iii) the projected heating and cool-
8	ing energy usage of such property, meas-
9	ured in terms of average annual energy
10	cost to taxpayer, is reduced by a percent-
11	age certified according to subparagraph
12	(C) in comparison to the energy cost of
13	such property if expenditures made by the
14	taxpayer with respect to energy efficient
15	improvements to such property were not
16	made.
17	"(B) Principal residence.—
18	"(i) In General.—The term 'prin-
19	cipal residence' has the same meaning as
20	when used in section 121, except that—
21	"(I) no ownership requirement
22	shall be imposed, and
23	"(II) the period for which a
24	building is treated as used as a prin-
25	cipal residence shall also include the

1	60-day period ending on the 1st day
2	on which it would (but for this sub-
3	paragraph) first be treated as used as
4	a principal residence.
5	"(ii) Manufactured Housing.—The
6	term 'residence' shall include a dwelling
7	unit which is a manufactured home con-
8	forming to Federal Manufactured Home
9	Construction and Safety Standards (24
10	C.F.R. 3280).
11	"(C) CERTIFICATION PROCEDURES.—
12	"(i) In general.—For purposes of
13	subparagraph (A)(iii), energy usage shall
14	be demonstrated by performance-based
15	compliance.
16	"(ii) Performance-based compli-
17	ANCE.—Performance-based compliance
18	shall be demonstrated if the percent energy
19	cost savings for heating and cooling is met
20	with respect to a dwelling unit when com-
21	pared to the original condition of the dwell-
22	ing unit.
23	"(iii) Computer software.—Com-
24	puter software shall be used in support of
25	performance-based compliance under

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clause (ii) and such software shall meet all of the procedures and methods for calculating energy savings reductions which are promulgated by the Secretary of Energy. Such regulations on the specifications for software and verification protocols shall be based on the 2005 California Residential Alternative Calculation Method Approval Manual.

"(iv) CALCULATION REQUIRE-MENTS.—In calculating tradeoffs and energy performance, the regulations shall prescribe the costs per unit of energy and power, such as kilowatt hour, kilowatt, gallon of fuel oil, and cubic foot or Btu of natural gas, which may be dependent on time of usage. If a State has developed annual energy usage and cost reduction procedures based on time of usage costs for use in the performance standards of the State's building energy code before the effective date of this section, the State may use those annual energy usage and cost reduction procedures in lieu of those adopted by the Secretary.

1	"(v) Approval of software sub-
2	MISSIONS.—The Secretary shall approve
3	software submissions which comply with
4	the calculation requirements of clause (iii).
5	"(vi) Procedures for inspection
6	AND TESTING OF DWELLING UNITS.—The
7	Secretary shall ensure that procedures for
8	the inspection and testing for compliance
9	comply with the calculation requirements
10	under clause (iii) and subsection (d)(2).
11	"(d) Special Rules.—For purposes of this sec-
12	tion—
13	"(1) Determinations of compliance.—A
14	determination of compliance made for the purposes
15	of this section shall be filed with the Secretary with-
16	in 1 year of the date of such determination and shall
17	include the TIN of the certifier, the address of the
18	building in compliance, and the identity of the per-
19	son for whom such determination was performed.
20	Determinations of compliance filed with the Sec-
21	retary shall be available for inspection by the Sec-
22	retary of Energy.
23	"(2) Compliance.—
24	"(A) IN GENERAL.—The Secretary, after
25	consultation with the Secretary of Energy shall

establish requirements for certification and compliance procedures after examining the requirements for energy consultants and home energy ratings providers specified by the Mortgage Industry National Home Energy Rating Standards.

"(B) Individuals qualified to determination of compliance may be provided by a local building regulatory authority, a utility, a manufactured home production inspection primary inspection agency (IPIA), or an accredited home energy rating system provider. All providers shall be accredited, or otherwise authorized to use approved energy performance measurement methods, by the Residential Energy Services Network (RESNET).

- "(3) DOLLAR AMOUNTS IN CASE OF JOINT OC-CUPANCY.—In the case of any dwelling unit which if jointly occupied and used during any calendar year as a principal residence by 2 or more individuals the following rules shall apply:
- "(A) The amount of the credit allowable under subsection (a) by reason of expenditures made during such calendar year by any of such

individuals with respect to such dwelling unit shall be determined by treating all of such individuals as 1 taxpayer whose taxable year is such calendar year.

"(B) There shall be allowable with respect to such expenditures to each of such individuals, a credit under subsection (a) for the taxable year in which such calendar year ends in an amount which bears the same ratio to the amount determined under subparagraph (A) as the amount of such expenditures made by such individual during such calendar year bears to the aggregate of such expenditures made by all of such individuals during such calendar year.

"(4) Tenant-stockholder in cooperative Housing corporation.—In the case of an individual who is a tenant-stockholder (as defined in section 216) in a cooperative housing corporation (as defined in such section), such individual shall be treated as having made his tenant-stockholder's proportionate share (as defined in section 216(b)(3)) of any expenditures of such corporation and such credit shall be allocated pro rata to such individual.

## "(5) Condominiums.—

"(A) IN GENERAL.—In the case of an individual who is a member of a condominium management association with respect to a condominium which he owns, such individual shall be treated as having made his proportionate share of any expenditures of such association and any credit shall be allocated appropriately.

"(B) CONDOMINIUM MANAGEMENT ASSO-CIATION.—For purposes of this paragraph, the term 'condominium management association' means an organization which meets the requirements of paragraph (1) of section 528(c) (other than subparagraph (E) thereof) with respect to a condominium project substantially all of the units of which are used as principal residences. "(6) Joint Ownership of energy items.—

- "(A) IN GENERAL.—Any expenditure otherwise qualifying as an expenditure under this section shall not be treated as failing to so qualify merely because such expenditure was made with respect to 2 or more dwelling units.
- "(B) LIMITS APPLIED SEPARATELY.—In the case of any expenditure described in subparagraph (A), the amount of the credit allowable under subsection (a) shall (subject to para-

1	graph (1)) be computed separately with respect
2	to the amount of the expenditure made for each
3	dwelling unit.
4	"(7) Allocation in Certain Cases.—If less
5	than 80 percent of the use of an item is for nonbusi-
6	ness purposes, only that portion of the expenditures
7	for such item which is properly allocable to use for
8	nonbusiness purposes shall be taken into account.
9	"(8) Coordination with other credits.—
10	Property which would, but for this paragraph, be eli-
11	gible for credit under more than one provision of
12	this section shall be eligible only under one such pro-
13	vision, the provision specified by the taxpayer.
14	"(9) Year credit allowed.—The credit
15	under subsection (a)(2) shall be allowed in the tax-
16	able year in which the percentage reduction with re-
17	spect to the principal residence is certified.
18	"(10) When expenditure made; amount of
19	EXPENDITURE.—
20	"(A) In general.—Except as provided in
21	subparagraph (B), an expenditure with respect
22	to an item shall be treated as made when the
23	original installation of the item is completed.
24	"(B) Expenditures part of building
25	CONSTRUCTION.—In the case of an expenditure

1	in connection with the construction of a struc-
2	ture, such expenditure shall be treated as made
3	when the original use of the constructed struc-
4	ture by the taxpayer begins.
5	"(11) Property financed by subsidized
6	ENERGY FINANCING.—
7	"(A) REDUCTION OF EXPENDITURES.—
8	"(i) In general.—Except as pro-
9	vided in subparagraph (C), for purposes of
10	determining the amount of expenditures
11	made by any individual with respect to any
12	dwelling unit, there shall not be taken into
13	account expenditures which are made from
14	subsidized energy financing.
15	"(ii) Subsidized energy financ-
16	ING.—For purposes of clause (i), the term
17	'subsidized energy financing' has the same
18	meaning given such term in section
19	48(a)(4)(C).
20	"(B) DOLLAR LIMITS REDUCED.—The dol-
21	lar amounts in the table contained in subsection
22	(b)(3) with respect to each property purchased
23	for such dwelling unit for any taxable year of
24	such taxpayer shall be reduced proportionately
25	by an amount equal to the sum of—

1	"(i) the amount of the expenditures
2	made by the taxpayer during such taxable
3	year with respect to such dwelling unit and
4	not taken into account by reason of sub-
5	paragraph (A), and
6	"(ii) the amount of any Federal
7	State, or local grant received by the tax-
8	payer during such taxable year which is
9	used to make residential energy property
10	expenditures with respect to the dwelling
11	unit and is not included in the gross in-
12	come of such taxpayer.
13	"(C) Exception for state programs.—
14	Subparagraphs (A) and (B) shall not apply to
15	expenditures made with respect to property for
16	which the taxpayer has received a loan, State
17	tax credit, or grant under any State energy pro-
18	gram.
19	"(e) Basis Adjustments.—For purposes of this
20	subtitle, if a credit is allowed under this section for any
21	expenditure with respect to any property, the increase in
22	the basis of such property which would (but for this sub-
23	section) result from such expenditure shall be reduced by
24	the amount of the credit so allowed.

1	"(f) Regulations.—The Secretary shall promulgate
2	such regulations as necessary to take into account new
3	technologies regarding energy efficiency and renewable en-
4	ergy for purposes of determining energy efficiency and
5	savings under this section.
6	"(g) TERMINATION.—This section shall not apply
7	with respect to any energy property placed in service after
8	December 31, 2008 (December 31, 2005, in the case of
9	Tier 1 energy-efficient building property).".
10	(b) Conforming Amendments.—
11	(1) Subsection (a) of section 1016 of the Inter-
12	nal Revenue Code of 1986 as amended by section
13	103, is amended by striking "and" at the end of
14	paragraph (30), by striking the period at the end of
15	paragraph (31) and inserting ", and", and by add-
16	ing at the end the following new paragraph:
17	"(32) to the extent provided in section 25C(e),
18	in the case of amounts with respect to which a credit
19	has been allowed under section 25C.".
20	(2) The table of sections for subpart A of part
21	IV of subchapter A of chapter 1 of such Code is
22	amended by inserting after the item relating to sec-
23	tion 25B the following new item:
	"Sec. 25C. Nonbusiness energy property.".
24	(c) Effective Dates.—

1	(1) In general.—Except as provided in para-
2	graph (2), the amendments made by this section
3	shall apply to expenditures made after December 31,
4	2003.
5	(2) Energy efficient building property
6	USED IN A PRINCIPAL RESIDENCE.—In the case of
7	energy efficient building property, as defined in sec-
8	tion 25B(c) of the Internal Revenue Code of 1986,
9	as added by subsection (a), the amendments made
10	by this section shall apply to expenditures made
11	after March 31, 2003.
12	SEC. 105. ENERGY CREDIT FOR COMBINED HEAT AND
13	POWER SYSTEM PROPERTY.
13 14	<b>POWER SYSTEM PROPERTY.</b> (a) IN GENERAL.—Section 48(a)(3)(A) of the Inter-
14	(a) In General.—Section 48(a)(3)(A) of the Inter-
<ul><li>14</li><li>15</li><li>16</li></ul>	(a) In General.—Section 48(a)(3)(A) of the Internal Revenue Code of 1986 (defining energy property) is
<ul><li>14</li><li>15</li><li>16</li><li>17</li></ul>	(a) In General.—Section 48(a)(3)(A) of the Internal Revenue Code of 1986 (defining energy property) is amended by striking "or" at the end of clause (i), by add-
<ul><li>14</li><li>15</li><li>16</li><li>17</li></ul>	(a) In General.—Section 48(a)(3)(A) of the Internal Revenue Code of 1986 (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after
14 15 16 17 18	(a) IN GENERAL.—Section 48(a)(3)(A) of the Internal Revenue Code of 1986 (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after clause (ii) the following new clause:
<ul><li>14</li><li>15</li><li>16</li><li>17</li><li>18</li><li>19</li></ul>	(a) In General.—Section 48(a)(3)(A) of the Internal Revenue Code of 1986 (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after clause (ii) the following new clause:  "(iii) combined heat and power system
14 15 16 17 18 19 20	(a) In General.—Section 48(a)(3)(A) of the Internal Revenue Code of 1986 (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after clause (ii) the following new clause:  "(iii) combined heat and power system property,".
<ul><li>14</li><li>15</li><li>16</li><li>17</li><li>18</li><li>19</li><li>20</li><li>21</li></ul>	<ul> <li>(a) In General.—Section 48(a)(3)(A) of the Internal Revenue Code of 1986 (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after clause (ii) the following new clause:  "(iii) combined heat and power system property,". </li> <li>(b) Combined Heat and Power System Property.</li> </ul>

1	"(c) Combined Heat and Power System Prop-
2	ERTY.—For purposes of subsection (a)(3)(A)(iii)—
3	"(1) Combined heat and power system
4	PROPERTY.—The term 'combined heat and power
5	system property' means property comprising a sys-
6	tem—
7	"(A) which uses the same energy source
8	for the simultaneous or sequential generation of
9	electrical power, mechanical shaft power, or
10	both, in combination with the generation of
11	steam or other forms of useful thermal energy
12	(including heating and cooling applications),
13	"(B) which has an electrical capacity of
14	not more than 15 megawatts or a mechanical
15	energy capacity of not more than 2,000 horse-
16	power or an equivalent combination of electrical
17	and mechanical energy capacities,
18	"(C) which produces—
19	"(i) at least 20 percent of its total
20	useful energy in the form of thermal en-
21	ergy which is not used to produce electrical
22	or mechanical power (or combination
23	thereof), and

1	"(ii) at least 20 percent of its total
2	useful energy in the form of electrical or
3	mechanical power (or combination thereof),
4	"(D) the energy efficiency percentage of
5	which exceeds 60 percent, and
6	"(E) which is placed in service before Jan-
7	uary 1, 2007.
8	"(2) Special rules.—
9	"(A) Energy efficiency percent-
10	AGE.—For purposes of this subsection, the en-
11	ergy efficiency percentage of a system is the
12	fraction—
13	"(i) the numerator of which is the
14	total useful electrical, thermal, and me-
15	chanical power produced by the system at
16	normal operating rates, and expected to be
17	consumed in its normal application, and
18	"(ii) the denominator of which is the
19	lower heating value of the fuel sources for
20	the system.
21	"(B) Determinations made on btu
22	BASIS.—The energy efficiency percentage and
23	the percentages under paragraph (1)(C) shall
24	be determined on a Btu basis.

1	"(C) Input and output property not
2	INCLUDED.—The term 'combined heat and
3	power system property' does not include prop-
4	erty used to transport the energy source to the
5	facility or to distribute energy produced by the
6	facility.
7	"(D) Public utility property.—
8	"(i) Accounting rule for public
9	UTILITY PROPERTY.—If the combined heat
10	and power system property is public utility
11	property (as defined in section 168(i)(10)),
12	the taxpayer may only claim the credit
13	under subsection (a) if, with respect to
14	such property, the taxpayer uses a normal-
15	ization method of accounting.
16	"(ii) Certain exception not to
17	APPLY.—The matter in subsection $(a)(3)$
18	which follows subparagraph (D) thereof
19	shall not apply to combined heat and
20	power system property.
21	"(3) Systems using bagasse.—If a system is
22	designed to use bagasse for at least 90 percent of
23	the energy source—
24	"(A) paragraph (1)(D) shall not apply, but

- 1 "(B) the amount of credit determined 2 under subsection (a) with respect to such sys-3 tem shall not exceed the amount which bears 4 the same ratio to such amount of credit (deter-5 mined without regard to this paragraph) as the 6 energy efficiency percentage of such system 7 bears to 60 percent.".
- 8 (c) EFFECTIVE DATE.—The amendments made by 9 this subsection shall apply to periods after December 31, 10 2003, in taxable years ending after such date, under rules 11 similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date 13 of the enactment of the Revenue Reconciliation Act of 1990).

## 15 SEC. 106. CREDIT FOR ENERGY EFFICIENT APPLIANCES.

- 16 (a) In General.—Subpart D of part IV of sub-
- 17 chapter A of chapter 1 of the Internal Revenue Code of
- 18 1986 (relating to business-related credits), as amended by
- 19 section 102, is amended by adding at the end the following
- 20 new section:

## 21 "SEC. 45H. ENERGY EFFICIENT APPLIANCE CREDIT.

- 22 "(a) Allowance of Credit.—For purposes of sec-
- 23 tion 38, the energy efficient appliance credit determined
- 24 under this section for the taxable year is an amount equal
- 25 to the sum of—

1	"(1) the tier I appliance amount, and
2	"(2) the tier II appliance amount,
3	with respect to qualified energy efficient appliances pro-
4	duced by the taxpayer during the calendar year ending
5	with or within the taxable year.
6	"(b) APPLIANCE AMOUNTS.—For purposes of sub-
7	section (a)—
8	"(1) TIER I APPLIANCE AMOUNT.—The tier I
9	appliance amount is equal to—
10	"(A) \$100, multiplied by
11	"(B) an amount (rounded to the nearest
12	whole number) equal to the applicable percent-
13	age of the eligible production.
14	"(2) TIER II APPLIANCE AMOUNT.—The tier II
15	appliance amount is equal to \$150, multiplied by an
16	amount equal to the eligible production reduced by
17	the amount determined under paragraph (1)(B).
18	"(3) Applicable percentage.—The applica-
19	ble percentage is the percentage determined by di-
20	viding the tier I appliances produced by the taxpayer
21	during the calendar year by the sum of the tier I
22	and tier II appliances so produced.
23	"(4) Eligible production.—The eligible pro-
24	duction of qualified energy efficient appliances by
25	the taxpayer for any calendar year is the excess of—

1	"(A) the number of such appliances which
2	are produced by the taxpayer during such cal-
3	endar year, over
4	"(B) 110 percent of the average annual
5	number of such appliances which were produced
6	by the taxpayer (or any predecessor) during the
7	preceding 3-calendar year period.
8	"(c) Qualified Energy Efficient Appliance.—
9	For purposes of this section—
10	"(1) In general.—The term 'qualified energy
11	efficient appliance' means any tier I appliance or tier
12	II appliance which is produced in the United States.
13	"(2) Tier I appliance.—The term 'tier I ap-
14	pliance' means—
15	"(A) a clothes washer which is produced
16	with at least a 1.50 MEF, and
17	"(B) a refrigerator which consumes at
18	least 15 percent (20 percent in the case of a re-
19	frigerator produced after 2006) less kilowatt
20	hours per year than the energy conservation
21	standards for refrigerators promulgated by the
22	Department of Energy and effective on July 1,
23	2001.
24	"(3) Tier II appliance.—The term 'tier II ap-
25	pliance' means a refrigerator produced before 2007

- which consumes at least 20 percent less kilowatt hours per year than the energy conservation standards described in paragraph (2)(B).
- 4 "(4) CLOTHES WASHER.—The term 'clothes 5 washer' means a residential clothes washer, includ-6 ing a residential style coin operated washer.
- 7 "(5) REFRIGERATOR.—The term 'refrigerator'
  8 means an automatic defrost refrigerator-freezer
  9 which has an internal volume of at least 16.5 cubic
  10 feet.
- "(6) MEF.—The term 'MEF' means Modified Energy Factor (as determined by the Secretary of Energy).
- 14 "(7) PRODUCED.—The term 'produced' in-15 cludes manufactured.
- 16 "(d) Limitation on Maximum Credit.—
- 17 "(1) IN GENERAL.—The amount of credit allowed under subsection (a) with respect to a tax19 payer for any taxable year shall not exceed
  20 \$60,000,000, reduced by the amount of the credit
  21 allowed under subsection (a) to the taxpayer (or any
  22 predecessor) for any prior taxable year.
  - "(2) LIMITATION BASED ON GROSS RE-CEIPTS.—The credit allowed under subsection (a) with respect to a taxpayer for the taxable year shall

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1	not exceed an amount equal to 2 percent of the aver-
2	age annual gross receipts of the taxpayer for the 3
3	taxable years preceding the taxable year for which
4	the credit is determined.
5	"(3) Gross receipts.—For purposes of this
6	subsection, the rules of paragraphs (2) and (3) of
7	section 448(c) shall apply.
8	"(e) Special Rules.—For purposes of this sec-
9	tion—
10	"(1) In general.—Rules similar to the rules
11	of subsections (c), (d), and (e) of section 52 shall
12	apply.
13	"(2) Controlled Groups.—
14	"(A) IN GENERAL.—All persons treated as
15	a single employer under subsection (a) or (b) of
16	section 52 or subsection (m) or (o) of section
17	414 shall be treated as a single manufacturer.
18	"(B) Inclusion of foreign corpora-
19	TIONS.—For purposes of subparagraph (A), in
20	applying subsections (a) and (b) of section 52
21	to this section, section 1563 shall be applied
22	without regard to subsection (b)(2)(C) thereof.
23	"(f) Verification.—The taxpayer shall submit such
24	information or certification as the Secretary, after con-

- 1 sultation with the Secretary of Energy, determines nec-
- 2 essary to claim the credit amount under subsection (a).
- 3 "(g) Termination.—This section shall not apply
- 4 with respect to appliances produced after December 31,
- 5 2007.".
- 6 (b) Credit Made Part of General Business
- 7 Credit.—Section 38(b) of the Internal Revenue Code of
- 8 1986 (relating to current year business credit), as amend-
- 9 ed by section 102, is amended by striking "plus" at the
- 10 end of paragraph (15), by striking the period at the end
- 11 of paragraph (16) and inserting ", plus", and by adding
- 12 at the end the following new paragraph:
- "(17) the energy efficient appliance credit de-
- termined under section 45H(a).".
- 15 (c) Limitation on Carryback.—Section 39(d) of
- 16 the Internal Revenue Code of 1986 (relating to transition
- 17 rules), as amended by section 102, is amended by adding
- 18 at the end the following new paragraph:
- 19 "(12) No carryback of energy efficient
- 20 APPLIANCE CREDIT BEFORE EFFECTIVE DATE.—No
- 21 portion of the unused business credit for any taxable
- year which is attributable to the energy efficient ap-
- pliance credit determined under section 45H(a) may
- be carried to a taxable year ending before January
- 25 1, 2004.".

1	(d) Clerical Amendment.—The table of sections
2	for subpart D of part IV of subchapter A of chapter 1
3	of the Internal Revenue Code of 1986, as amended by sec-
4	tion 102, is amended by adding at the end the following
5	new item:
	"Sec. 45H. Energy efficient appliance credit.".
6	(e) Effective Date.—The amendments made by
7	this section shall apply to appliances produced after De-
8	cember 31, 2003, in taxable years ending after such date.
9	TITLE II—ENERGY EFFICIENT
10	PRODUCTS
11	SEC. 201. ENERGY CONSERVATION STANDARDS FOR ADDI-
12	TIONAL PRODUCTS.
13	(a) Definitions.—Section 321 of the Energy Policy
14	and Conservation Act (42 U.S.C. 6291) is amended—
15	(1) in paragraph (30)(S), by striking the period
16	and adding at the end the following: "but does not
17	include any lamp specifically designed to be used for
18	special purpose applications and that is unlikely to
19	be used in general purpose applications such as
20	those described in subparagraph (D), and also does
21	not include any lamp not described in subparagraph
22	(D) that is excluded by the Secretary, by rule, be-
23	cause the lamp is designed for special applications
<ul><li>23</li><li>24</li></ul>	

1	(2) by adding at the end the following:
2	"(32) The term 'battery charger' means a de-
3	vice that charges batteries for consumer products
4	and includes battery chargers embedded in other
5	consumer products.
6	"(33) The term 'ceiling fan' means a nonport-
7	able device that is suspended from a ceiling for cir-
8	culating air through the rotation of fan blades.
9	"(34) The term 'ceiling fan light kit' means
10	equipment designed to provide light from a ceiling
11	fan that can be—
12	"(A) integral, such that the equipment is
13	attached to the ceiling fan prior to the time of
14	retail sale; or
15	"(B) attachable, such that at the time of
16	retail sale the equipment is not physically at-
17	tached to the ceiling fan, but may be included
18	inside the ceiling fan package at the time of
19	sale or sold separately for subsequent attach-
20	ment to the fan.
21	"(35) The term 'commercial refrigerators,
22	freezers, and refrigerator-freezers' means refrig-
23	erators, freezers, or refrigerator-freezers that—
24	"(A) are not consumer products regulated
25	under this Act; and

1	"(B) incorporate most components involved
2	in the vapor-compression cycle and the refrig-
3	erated compartment in a single package.
4	"(36) The term 'external power supply' means
5	an external power supply circuit that is used to con-
6	vert household electric current into either DC cur-
7	rent or lower-voltage AC current to operate a con-
8	sumer product.
9	"(37) The term 'illuminated exit sign' means a
10	sign that—
11	"(A) is designed to be permanently fixed in
12	place to identify an exit; and
13	"(B) consists of an electrically powered in-
14	tegral light source that illuminates the legend
15	'EXIT' and any directional indicators and pro-
16	vides contrast between the legend, any direc-
17	tional indicators, and the background.
18	"(38)(A) Except as provided in subparagraph
19	(B), the term 'distribution transformer' means a
20	transformer that—
21	"(i) has an input voltage of 34.5 kilovolts
22	or less;
23	"(ii) has an output voltage of 600 volts or
24	less: and

1	"(iii) is rated for operation at a frequency
2	of 60 Hertz.
3	"(B) The term 'distribution transformer' does
4	not include—
5	"(i) transformers with multiple voltage
6	taps, with the highest voltage tap equaling at
7	least 20 percent more than the lowest voltage
8	tap;
9	"(ii) transformers, such as those commonly
10	known as drive transformers, rectifier trans-
11	formers, auto-transformers, Uninterruptible
12	Power System transformers, impedance trans-
13	formers, harmonic transformers, regulating
14	transformers, sealed and nonventilating trans-
15	formers, machine tool transformers, welding
16	transformers, grounding transformers, or test-
17	ing transformers, that are designed to be used
18	in a special purpose application and are unlikely
19	to be used in general purpose applications; or
20	"(iii) any transformer not listed in clause
21	(ii) that is excluded by the Secretary by rule be-
22	cause—
23	"(I) the transformer is designed for a
24	special application:

1	"(II) the transformer is unlikely to be
2	used in general purpose applications; and
3	"(III) the application of standards to
4	the transformer would not result in signifi-
5	cant energy savings.
6	"(39) The term 'low-voltage dry-type distribu-
7	tion transformer' means a distribution transformer
8	that—
9	"(A) has an input voltage of 600 volts or
10	less;
11	"(B) is air-cooled; and
12	"(C) does not use oil as a coolant.
13	"(40) The term 'standby mode' means the low-
14	est power consumption mode that—
15	"(A) cannot be switched off or influenced
16	by the user; and
17	"(B) may persist for an indefinite time
18	when an appliance is connected to the main
19	electricity supply and used in accordance with
20	the manufacturer's instructions,
21	as defined on an individual product basis by the Sec-
22	retary.
23	"(41) The term 'torchiere' means a portable
24	electric lamp with a reflector bowl that directs light
25	upward so as to give indirect illumination.

- "(42) The term 'traffic signal module' means a standard 8-inch (200mm) or 12-inch (300mm) traffic signal indication, consisting of a light source, a lens, and all other parts necessary for operation, that communicates movement messages to drivers through red, amber, and green colors.
  - "(43) The term 'transformer' means a device consisting of 2 or more coils of insulated wire that transfers alternating current by electromagnetic induction from 1 coil to another to change the original voltage or current value.
- "(44) The term 'unit heater' means a self-contained fan-type heater designed to be installed within the heated space, except that such term does not include a warm air furnace.".
- 16 (b) Test Procedures.—Section 323 of the Energy 17 Policy and Conservation Act (42 U.S.C. 6293) is amend-18 ed—
- 19 (1) in subsection (b), by adding at the end the 20 following:
- "(9) Test procedures for illuminated exit signs shall be based on the test method used under Version 2.0 of the Energy Star program of the Environmental Protection Agency for illuminated exit signs.

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"(10) Test procedures for distribution trans-1 2 formers and low voltage dry-type distribution trans-3 formers shall be based on the 'Standard Test Method for Measuring the Energy Consumption of Dis-5 tribution Transformers' prescribed by the National 6 Electrical Manufacturers Association (NEMA TP 2– 7 1998). The Secretary may review and revise this test 8 procedure. For purposes of section 346(a), this test 9 procedure shall be deemed to be testing require-10 ments prescribed by the Secretary under section 11 346(a)(1) for distribution transformers for which the 12 Secretary makes a determination that energy con-13 servation standards would be technologically feasible 14 and economically justified, and would result in sig-15 nificant energy savings.

"(11) Test procedures for traffic signal modules shall be based on the test method used under the Energy Star program of the Environmental Protection Agency for traffic signal modules, as in effect on the date of enactment of this paragraph.

"(12) Test procedures for medium base compact fluorescent lamps shall be based on the test methods used under the October 30, 2003, version of the Energy Star program of the Environmental Protection Agency and Department of Energy for

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- 1 compact fluorescent lamps. Covered products shall 2 meet all test requirements for regulated parameters 3 in section 325(bb). However, covered products may be marketed prior to completion of lamp life and 5 lumen maintenance at 40 percent of rated life test-6 ing provided manufacturers document engineering 7 predictions and analysis that support expected attainment of lumen maintenance at 40 percent rated 8 9 life and lamp life time.
  - "(13) Air movement test procedures for ceiling fans shall be based on the test procedure contained in the Energy Star Program Requirements for Residential Ceiling Fans (Version 2.0) developed by the Environmental Protection Agency, unless pursuant to this section, the Secretary promulgates regulations establishing an alternative test procedure."; and
- 18 (2) by adding at the end the following:
- 19 "(f) Additional Consumer and Commercial
- 20 Products.—

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"(1) IN GENERAL.—Not later than 2 years after the date of enactment of this subsection, the Secretary shall prescribe testing requirements for refrigerated bottled or canned beverage vending ma-

- chines, and commercial refrigerators, freezers, and refrigerator-freezers.
- 3 "(2) Basis.—The testing requirements shall be
- 4 based on existing test procedures used in industry,
- 5 to the extent practicable.".
- 6 (c) New Standards.—Section 325 of the Energy
- 7 Policy and Conservation Act (42 U.S.C. 6295) is amended
- 8 by adding at the end the following:
- 9 "(u) Battery Charger and External Power
- 10 SUPPLY ELECTRIC ENERGY CONSUMPTION.—
- 11 "(1) INITIAL RULEMAKING.—(A) The Secretary 12 shall, within 18 months after the date of enactment
- of this subsection, prescribe by notice and comment,
- definitions and test procedures for the power use of
- battery chargers and external power supplies. In es-
- tablishing these test procedures, the Secretary shall
- 17 consider, among other factors, existing definitions
- and test procedures used for measuring energy con-
- sumption in standby mode and other modes and as-
- sess the current and projected future market for
- 21 battery chargers and external power supplies. This
- assessment shall include estimates of the significance
- of potential energy savings from technical improve-
- 24 ments to these products and suggested product
- classes for standards. Prior to the end of this time

- period, the Secretary shall hold a scoping workshop to discuss and receive comments on plans for developing energy conservation standards for energy use for these products.
  - "(B) The Secretary shall, within 3 years after the date of enactment of this subsection, issue a final rule that determines whether energy conservation standards shall be issued for battery chargers and external power supplies or classes thereof. For each product class, any such standards shall be set at the lowest level of energy use that—
    - "(i) meets the criteria and procedures of subsections (o), (p), (q), (r), (s), and (t); and
    - "(ii) will result in significant overall annual energy savings, considering both standby mode and other operating modes.
  - "(2) Review of Standby energy use in covered products.—In determining pursuant to section 323 whether test procedures and energy conservation standards pursuant to this section should be revised, the Secretary shall consider, for covered products that are major sources of standby mode energy consumption, whether to incorporate standby mode into such test procedures and energy conservation standards, taking into account, among other

- relevant factors, standby mode power consumption compared to overall product energy consumption.
- "(3) RULEMAKING.—The Secretary shall not propose a standard under this section unless the Secretary has issued applicable test procedures for each product pursuant to section 323.
  - "(4) Effective date.—Any standard issued under this subsection shall be applicable to products manufactured or imported 3 years after the date of issuance.
- 11 "(5) VOLUNTARY PROGRAMS.—The Secretary
  12 and the Administrator shall collaborate and develop
  13 programs, including programs pursuant to section
  14 324A (relating to Energy Star Programs) and other
  15 voluntary industry agreements or codes of conduct,
  16 that are designed to reduce standby mode energy
  17 use.
- 18 "(v) Vending Machines, and Commercial Re-19 frigerators, Freezers, and Refrigerator-Freez-20 ers.—
- "(1) IN GENERAL.—Not later than 3 years after the date on which testing requirements are prescribed by the Secretary pursuant to section 323(f), the Secretary shall prescribe, by rule, energy conservation standards for refrigerated bottled or

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- canned beverage vending machines, and commercial
   refrigerators, freezers, and refrigerator-freezers.
- 3 "(2) Criteria and Procedures.—In estab-
- 4 lishing standards under this subsection, the Sec-
- 5 retary shall use the criteria and procedures con-
- 6 tained in subsections (o) and (p).
- 7 "(3) APPLICABILITY.—Any standard prescribed
- 8 under this subsection shall apply to products manu-
- 9 factured 3 years after the date of publication of a
- final rule establishing the standard.
- 11 "(w) Illuminated Exit Signs.—Illuminated exit
- 12 signs manufactured on or after January 1, 2005, shall
- 13 meet the Version 2.0 Energy Star Program performance
- 14 requirements for illuminated exit signs prescribed by the
- 15 Environmental Protection Agency.
- 16 "(x) Torchieres manufactured on or
- 17 after January 1, 2005—
- 18 "(1) shall consume not more than 190 watts of
- power; and
- 20 "(2) shall not be capable of operating with
- 21 lamps that total more than 190 watts.
- 22 "(y) Low Voltage Dry-Type Distribution
- 23 Transformers.—The efficiency of low voltage dry-type
- 24 distribution transformers manufactured on or after Janu-
- 25 ary 1, 2005, shall be the Class I Efficiency Levels for dis-

- 1 tribution transformers specified in Table 4–2 of the 'Guide
- 2 for Determining Energy Efficiency for Distribution Trans-
- 3 formers' published by the National Electrical Manufactur-
- 4 ers Association (NEMA TP-1-2002).
- 5 "(z) Traffic Signal Modules.—Traffic signal
- 6 modules manufactured on or after January 1, 2006, shall
- 7 meet the performance requirements used under the En-
- 8 ergy Star program of the Environmental Protection Agen-
- 9 cy for traffic signals, as in effect on the date of enactment
- 10 of this subsection, and shall be installed with compatible,
- 11 electrically connected signal control interface devices and
- 12 conflict monitoring systems.
- 13 "(aa) Unit Heaters.—Unit heaters manufactured
- 14 on or after the date that is 3 years after the date of enact-
- 15 ment of this subsection shall be equipped with an intermit-
- 16 tent ignition device and shall have either power venting
- 17 or an automatic flue damper.
- 18 "(bb) Medium Base Compact Fluorescent
- 19 Lamps.—Bare lamp and covered lamp (no reflector) me-
- 20 dium base compact fluorescent lamps manufactured on or
- 21 after January 1, 2005, shall meet the following require-
- 22 ments prescribed by the August 9, 2001, version of the
- 23 Energy Star Program Requirements for Compact Fluores-
- 24 cent Lamps, Energy Star Eligibility Criteria, Energy-Effi-
- 25 ciency Specification issued by the Environmental Protec-

1	tion Agency and Department of Energy: minimum initial
2	efficacy; lumen maintenance at 1000 hours; lumen mainte-
3	nance at 40 percent of rated life; rapid cycle stress test;
4	and lamp life. The Secretary may, by rule, establish re-
5	quirements for color quality (CRI); power factor; oper-
6	ating frequency; and maximum allowable start time based
7	on the requirements prescribed by the October 30, 2003,
8	version of the Energy Star Program Requirements for
9	Compact Fluorescent Lamps. The Secretary may, by rule,
10	revise these requirements or establish other requirements
11	considering energy savings, cost effectiveness, and con-
12	sumer satisfaction.
13	"(cc) Ceiling Fans and Ceiling Fan Light
14	Kits.—
15	"(1) Ceiling fans.—All ceiling fans manufac-
16	tured on or after January 1, 2007, shall have—
17	"(A) lighting controls separate from fan
18	speed controls;
19	"(B) adjustable speed controls (either
20	more than 1 speed or variable speeds); and
21	"(C) the capability of reversible fan action,
22	except (as determined by the Secretary by regu-
23	lation)—
24	"(i) for fans sold for industrial appli-
25	cations;

1	"(ii) for fans sold for outdoor applica-
2	tions; and
3	"(iii) where safety standards would be
4	violated by the use of the reversible mode.
5	"(2) Ceiling fan light kits.—Ceiling fan
6	light kits manufactured on or after January 1,
7	2007, shall—
8	"(A) meet the Energy Star Program Re-
9	quirements for Residential Light Fixtures
10	(Version 3.1) issued by the Environmental Pro-
11	tection Agency and be packaged with lamps to
12	fill all sockets;
13	"(B) be packaged with screw-based com-
14	pact fluorescent lamps to fill all sockets, with
15	such lamps meeting the Energy Star Program
16	Requirements for Compact Fluorescent Lamps
17	(Version 3.0) issued by the Department of En-
18	ergy; or
19	"(C) use and be packaged with light
20	sources, other than compact fluorescent lamps,
21	that meet the minimum efficacy requirements
22	(as measured in lumens per watt) of the Energy
23	Star Program Requirements for Compact Fluo-
24	rescent Lamps (Version 3.0) issued by the De-
25	partment of Energy.

1	"(3) Energy efficiency standards for
2	CEILING FANS.—
3	"(A) IN GENERAL.—Notwithstanding any
4	provision of this Act, the Secretary may con-
5	sider, and prescribe, if the requirements of sub-
6	sections (o) and (p) are met, energy efficiency
7	or energy use standards (based on cubic feet
8	per minute per watt or watts) for electricity
9	used by ceiling fans to circulate air in a room.
10	"(B) Exemptions or different stand-
11	ARDS.—In prescribing the standards, the Sec-
12	retary shall consider—
13	"(i) exempting or setting different
14	standards for certain product classes for
15	which the primary standards are not tech-
16	nically feasible or economically justified;
17	and
18	"(ii) establishing separate exempted
19	product classes for highly decorative fans
20	for which air movement performance is a
21	secondary design feature.
22	"(C) Effective date.—Any air move-
23	ment standard prescribed under this subsection
24	shall apply to products manufactured on or

- after the date that is 3 years after publication of a final rule establishing the standard.
- 3 "(dd) Effective Date.—Section 327 shall apply—
- "(1) to products for which standards are to be 4 5 established under subsections (u) and (v) on the 6 date on which a final rule is issued by the Depart-7 ment of Energy, except that any State or local 8 standards prescribed or enacted for any such prod-9 uct prior to the date on which such final rule is 10 issued shall not be preempted until the standard es-11 tablished under subsection (u) or (v) for that prod-12 uct takes effect; and
  - "(2) to products for which standards are established under subsections (w) through (bb) on the date of enactment of those subsections, except that any State or local standards prescribed or enacted prior to the date of enactment of those subsections shall not be preempted until the standards established under subsections (w) through (bb) take effect."
- 21 (d) Residential Furnace Fans.—Section
- 22 325(f)(3) of the Energy Policy and Conservation Act (42
- 23 U.S.C. 6295(f)(3)) is amended by adding the following
- 24 new subparagraph at the end:

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- 1 "(D) Notwithstanding any provision of this Act, the
- 2 Secretary may consider, and prescribe, if the requirements
- 3 of subsection (o) of this section are met, energy efficiency
- 4 or energy use standards for electricity used for purposes
- 5 of circulating air through duct work.".

## 6 SEC. 202. ENERGY LABELING.

- 7 (a) Rulemaking on Effectiveness of Consumer
- 8 Product Labeling.—Section 324(a)(2) of the Energy
- 9 Policy and Conservation Act (42 U.S.C. 6294(a)(2)) is
- 10 amended by adding at the end the following:
- 11 "(F) During the period beginning not later than 90
- 12 days after the date of enactment of this subparagraph and
- 13 ending not later than 2 years after the date of enactment
- 14 of this subparagraph, the Commission shall initiate a rule-
- 15 making to consider—
- 16 "(i) the effectiveness of the current consumer
- products labeling program in assisting consumers in
- 18 making purchasing decisions and improving energy
- 19 efficiency; and
- 20 "(ii) changes to the labeling rules that would
- 21 improve the effectiveness of consumer product la-
- 22 bels.".
- 23 (b) Rulemaking on Labeling for Additional
- 24 Products.—Section 324(a) of the Energy Policy and

- 1 Conservation Act (42 U.S.C. 6294(a)) is amended by add-
- 2 ing at the end the following:
- 3 "(5)(A) The Secretary or the Commission, as appro-
- 4 priate, may, for covered products referred to in sub-
- 5 sections (u) through (aa) of section 325, prescribe, by rule,
- 6 pursuant to this section, labeling requirements for the
- 7 products, after a test procedure has been established pur-
- 8 suant to section 323.
- 9 "(B) In the case of products to which TP 1 standards
- 10 under section 325(y) apply, labeling requirements shall be
- 11 based on the 'Standard for the Labeling of Distribution
- 12 Transformer Efficiency' prescribed by the National Elec-
- 13 trical Manufacturers Association (NEMA TP 3) as in ef-
- 14 fect on the date of enactment of this paragraph.
- 15 "(6)(A) Not later than July 1, 2005, the Commission
- 16 shall prescribe by rule, pursuant to this section, labeling
- 17 requirements for the electricity used by ceiling fans to cir-
- 18 culate air in a room.
- 19 "(B) Except as provided in subparagaph (C), the re-
- 20 quirements shall be based on the test procedure and label-
- 21 ing requirements contained in the Energy Star Program
- 22 Requirements for Residential Ceiling Fans (Version 2.0)
- 23 issued by the Environmental Protection Agency.
- 24 "(C) The Commission shall not promulgate rules cov-
- 25 ering third party testing and other nonlabeling require-

1	ments unless the Commission determines the requirements
2	are necessary to achieve compliance.
3	"(D) The rule shall apply to products manufactured
4	after the latter of—
5	"(i) January 1, 2007; or
6	"(ii) the date that is 60 days after the date the
7	final rule is promulgated.".
8	TITLE III—ENERGY EFFICIENCY
9	FEDERAL PROGRAMS
10	SEC. 301. PROCUREMENT OF ENERGY EFFICIENT PROD-
11	UCTS.
12	(a) Requirements.—Part 3 of title V of the Na-
13	tional Energy Conservation Policy Act (42 U.S.C. 8251
14	et seq.) is amended by adding at the end the following:
15	"SEC. 552. FEDERAL PROCUREMENT OF ENERGY EFFI-
16	CIENT PRODUCTS.
17	"(a) Definitions.—In this section:
18	"(1) Energy star product.—The term 'En-
19	ergy Star product' means a product that is rated for
20	energy efficiency under an Energy Star program.
21	"(2) Energy star program.—The term 'En-
22	ergy Star program' means the program established
23	by section 324A of the Energy Policy and Conserva-
24	tion Act.

1	"(3) Executive agency.—The term 'executive
2	agency' has the meaning given the term in section
3	4 of the Office of Federal Procurement Policy Act
4	(41 U.S.C. 403).
5	"(4) FEMP DESIGNATED PRODUCT.—The term
6	'FEMP designated product' means a product that is
7	designated under the Federal Energy Management
8	Program of the Department of Energy as being
9	among the highest 25 percent of equivalent products
10	for energy efficiency.
11	"(b) Procurement of Energy Efficient Prod-
12	UCTS.—
13	"(1) Requirement.—To meet the require-
14	ments of an executive agency for an energy con-
15	suming product, the head of the executive agency
16	shall, except as provided in paragraph (2), procure—
17	"(A) an Energy Star product; or
18	"(B) a FEMP designated product.
19	"(2) Exceptions.—The head of an executive
20	agency is not required to procure an Energy Star
21	product or FEMP designated product under para-
22	graph (1) if the head of the executive agency finds
23	in writing that—
24	"(A) an Energy Star product or FEMP
25	designated product is not cost-effective over the

life of the product taking energy cost savings
into account; or

"(B) no Energy Star product or FEMP designated product is reasonably available that meets the functional requirements of the executive agency.

"(3) PROCUREMENT PLANNING.—The head of an executive agency shall incorporate into the specifications for all procurements involving energy consuming products and systems, including guide specifications, project specifications, and construction, renovation, and services contracts that include provision of energy consuming products and systems, and into the factors for the evaluation of offers received for the procurement, criteria for energy efficiency that are consistent with the criteria used for rating Energy Star products and for rating FEMP designated products.

"(c) LISTING OF ENERGY EFFICIENT PRODUCTS IN
The Federal Catalogs.—Energy Star products and FEMP
designated products shall be clearly identified and prominently displayed in any inventory or listing of products
by the General Services Administration or the Defense Logistics Agency. The General Services Administration or
the Defense Logistics Agency shall supply only Energy

- 1 Star products or FEMP designated products for all prod-
- 2 uct categories covered by the Energy Star program or the
- 3 Federal Energy Management Program, except in cases
- 4 where the agency ordering a product specifies in writing
- 5 that no Energy Star product or FEMP designated product
- 6 is available to meet the buyer's functional requirements,
- 7 or that no Energy Star product or FEMP designated
- 8 product is cost-effective for the intended application over
- 9 the life of the product, taking energy cost savings into ac-
- 10 count.
- 11 "(d) Specific Products.—(1) In the case of elec-
- 12 tric motors of 1 to 500 horsepower, agencies shall select
- 13 only premium efficient motors that meet a standard des-
- 14 ignated by the Secretary. The Secretary shall designate
- 15 such a standard not later than 120 days after the date
- 16 of the enactment of this section, after considering the rec-
- 17 ommendations of associated electric motor manufacturers
- 18 and energy efficiency groups.
- 19 "(2) All Federal agencies are encouraged to take ac-
- 20 tions to maximize the efficiency of air conditioning and
- 21 refrigeration equipment, including appropriate cleaning
- 22 and maintenance, including the use of any system treat-
- 23 ment or additive that will reduce the electricity consumed
- 24 by air conditioning and refrigeration equipment. Any such
- 25 treatment or additive must be—

"(A) determined by the Secretary to be effective in increasing the efficiency of air conditioning and refrigeration equipment without having an adverse impact on air conditioning performance (including

cooling capacity) or equipment useful life;

- "(B) determined by the Administrator of the Environmental Protection Agency to be environmentally safe; and
- 9 "(C) shown to increase seasonal energy effi-10 ciency ratio (SEER) or energy efficiency ratio 11 (EER) when tested by the National Institute of 12 Standards and Technology according to Department 13 of Energy test procedures without causing any ad-14 verse impact on the system, system components, the 15 refrigerant or lubricant, or other materials in the 16 system.
- 17 Results of testing described in subparagraph (C) shall be
- 18 published in the Federal Register for public review and
- 19 comment. For purposes of this section, a hardware device
- 20 or primary refrigerant shall not be considered an additive.
- 21 "(e) Regulations.—Not later than 180 days after
- 22 the date of the enactment of this section, the Secretary
- 23 shall issue guidelines to carry out this section.".
- 24 (b) Conforming Amendment.—The table of con-
- 25 tents of the National Energy Conservation Policy Act is

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1	amended by inserting after the item relating to section
2	551 the following new item:
	"Sec. 552. Federal procurement of energy efficient products.".
3	SEC. 302. ENERGY SAVINGS PERFORMANCE CONTRACTS.
4	(a) Permanent Extension.—Effective September
5	30, 2003, section 801(c) of the National Energy Conserva-
6	tion Policy Act (42 U.S.C. 8287(c)) is repealed.
7	(b) Payment of Costs.—Section 802 of the Na-
8	tional Energy Conservation Policy Act (42 U.S.C. 8287a)
9	is amended by inserting ", water, or wastewater treat-
10	ment" after "payment of energy".
11	(c) Energy Savings.—Section 804(2) of the Na-
12	tional Energy Conservation Policy Act (42 U.S.C.
13	8287c(2)) is amended to read as follows:
<ul><li>13</li><li>14</li></ul>	8287c(2)) is amended to read as follows:  "(2) The term 'energy savings' means a reduc-
14	"(2) The term 'energy savings' means a reduc-
14 15	"(2) The term 'energy savings' means a reduc- tion in the cost of energy, water, or wastewater
<ul><li>14</li><li>15</li><li>16</li></ul>	"(2) The term 'energy savings' means a reduc- tion in the cost of energy, water, or wastewater treatment, from a base cost established through a
<ul><li>14</li><li>15</li><li>16</li><li>17</li></ul>	"(2) The term 'energy savings' means a reduc- tion in the cost of energy, water, or wastewater treatment, from a base cost established through a methodology set forth in the contract, used in an ex-
14 15 16 17 18	"(2) The term 'energy savings' means a reduc- tion in the cost of energy, water, or wastewater treatment, from a base cost established through a methodology set forth in the contract, used in an ex- isting federally owned building or buildings or other
14 15 16 17 18 19	"(2) The term 'energy savings' means a reduction in the cost of energy, water, or wastewater treatment, from a base cost established through a methodology set forth in the contract, used in an existing federally owned building or buildings or other federally owned facilities as a result of—
14 15 16 17 18 19 20	"(2) The term 'energy savings' means a reduction in the cost of energy, water, or wastewater treatment, from a base cost established through a methodology set forth in the contract, used in an existing federally owned building or buildings or other federally owned facilities as a result of—  "(A) the lease or purchase of operating
14 15 16 17 18 19 20 21	"(2) The term 'energy savings' means a reduction in the cost of energy, water, or wastewater treatment, from a base cost established through a methodology set forth in the contract, used in an existing federally owned building or buildings or other federally owned facilities as a result of—  "(A) the lease or purchase of operating equipment, improvements, altered operation and
14 15 16 17 18 19 20 21 22	"(2) The term 'energy savings' means a reduction in the cost of energy, water, or wastewater treatment, from a base cost established through a methodology set forth in the contract, used in an existing federally owned building or buildings or other federally owned facilities as a result of—  "(A) the lease or purchase of operating equipment, improvements, altered operation and maintenance, or technical services;

- other than a federally owned building or build-
- 2 ings or other federally owned facilities; or
- 3 "(C) the increased efficient use of existing
- 4 water sources in either interior or exterior ap-
- 5 plications.".
- 6 (d) Energy Savings Contract.—Section 804(3) of
- 7 the National Energy Conservation Policy Act (42 U.S.C.
- 8 8287c(3)) is amended to read as follows:
- 9 "(3) The terms 'energy savings contract' and
- 10 'energy savings performance contract' mean a con-
- tract that provides for the performance of services
- for the design, acquisition, installation, testing, and,
- where appropriate, operation, maintenance, and re-
- pair, of an identified energy or water conservation
- measure or series of measures at 1 or more loca-
- tions. Such contracts shall, with respect to an agen-
- 17 cy facility that is a public building (as such term is
- defined in section 3301 of title 40, United States
- 19 Code), be in compliance with the prospectus require-
- 20 ments and procedures of section 3307 of title 40,
- 21 United States Code.".
- 22 (e) Energy or Water Conservation Measure.—
- 23 Section 804(4) of the National Energy Conservation Pol-
- 24 icy Act (42 U.S.C. 8287c(4)) is amended to read as fol-
- 25 lows:

1	"(4) The term 'energy or water conservation
2	measure' means—
3	"(A) an energy conservation measure, as
4	defined in section 551; or
5	"(B) a water conservation measure that
6	improves the efficiency of water use, is life-cycle
7	cost-effective, and involves water conservation,
8	water recycling or reuse, more efficient treat-
9	ment of wastewater or stormwater, improve-
10	ments in operation or maintenance efficiencies,
11	retrofit activities, or other related activities, not
12	at a Federal hydroelectric facility.".
13	(f) Review.—Not later than 180 days after the date
14	of the enactment of this Act, the Secretary of Energy shall
15	complete a review of the Energy Savings Performance
16	Contract program to identify statutory, regulatory, and
17	administrative obstacles that prevent Federal agencies
18	from fully utilizing the program. In addition, this review
19	shall identify all areas for increasing program flexibility
20	and effectiveness, including audit and measurement
21	verification requirements, accounting for energy use in de-
22	termining savings, contracting requirements, including the
23	identification of additional qualified contractors, and en-
24	ergy efficiency services covered. The Secretary shall report
25	these findings to Congress and shall implement identified

- 1 administrative and regulatory changes to increase pro-
- 2 gram flexibility and effectiveness to the extent that such
- 3 changes are consistent with statutory authority.
- 4 (g) Extension of Authority.—Any energy sav-
- 5 ings performance contract entered into under section 801
- 6 of the National Energy Conservation Policy Act (42
- 7 U.S.C. 8287) after October 1, 2003, and before the date
- 8 of enactment of this Act, shall be deemed to have been
- 9 entered into pursuant to such section 801 as amended by
- 10 subsection (a) of this section.
- 11 SEC. 303. FEDERAL BUILDING PERFORMANCE STANDARDS.
- Section 305(a) of the Energy Conservation and Pro-
- 13 duction Act (42 U.S.C. 6834(a)) is amended—
- 14 (1) in paragraph (2)(A), by striking "CABO
- Model Energy Code, 1992" and inserting "the 2003
- 16 International Energy Conservation Code"; and
- 17 (2) by adding at the end the following:
- 18 "(3) Revised federal building energy effi-
- 19 CIENCY PERFORMANCE STANDARDS.—
- 20 "(A) IN GENERAL.—Not later than 1 year after
- 21 the date of enactment of this paragraph, the Sec-
- retary of Energy shall establish, by rule, revised
- Federal building energy efficiency performance
- 24 standards that require that—

1	"(i) if life-cycle cost-effective, for new Fed-
2	eral buildings—
3	"(I) such buildings be designed so as
4	to achieve energy consumption levels at
5	least 30 percent below those of the version
6	current as of the date of enactment of this
7	paragraph of the ASHRAE Standard or
8	the International Energy Conservation
9	Code, as appropriate; and
10	"(II) sustainable design principles are
11	applied to the siting, design, and construc-
12	tion of all new and replacement buildings;
13	and
14	"(ii) where water is used to achieve energy
15	efficiency, water conservation technologies shall
16	be applied to the extent they are life-cycle cost
17	effective.
18	"(B) Additional revisions.—Not later than
19	1 year after the date of approval of each subsequent
20	revision of the ASHRAE Standard or the Inter-
21	national Energy Conservation Code, as appropriate,
22	the Secretary of Energy shall determine, based on
23	the cost-effectiveness of the requirements under the
24	amendments, whether the revised standards estab-

1	lished under this paragraph should be updated to re-
2	flect the amendments.
3	"(C) STATEMENT ON COMPLIANCE OF NEW
4	BUILDINGS.—In the budget request of the Federal
5	agency for each fiscal year and each report sub-
6	mitted by the Federal agency under section 548(a)
7	of the National Energy Conservation Policy Act (42
8	U.S.C. 8258(a)), the head of each Federal agency
9	shall include—
10	"(i) a list of all new Federal buildings
11	owned, operated, or controlled by the Federal
12	agency; and
13	"(ii) a statement concerning whether the
14	Federal buildings meet or exceed the revised
15	standards established under this paragraph.".
16	TITLE IV—PUBLIC HOUSING
17	SEC. 401. PUBLIC HOUSING CAPITAL FUND.
18	Section 9 of the United States Housing Act of 1937
19	(42 U.S.C. 1437g) is amended—
20	(1) in subsection $(d)(1)$ —
21	(A) in subparagraph (I), by striking "and"
22	at the end;
23	(B) in subparagraph (J), by striking the
24	period at the end and inserting a semicolon;
25	and

1	(C) by adding at the end the following new
2	subparagraphs:
3	"(K) improvement of energy and water-use
4	efficiency by installing fixtures and fittings that
5	conform to the American Society of Mechanical
6	Engineers/American National Standards Insti-
7	tute standards A112.19.2–1998 and
8	A112.18.1–2000, or any revision thereto, appli-
9	cable at the time of installation, and by increas-
10	ing energy efficiency and water conservation by
11	such other means as the Secretary determines
12	are appropriate; and
13	"(L) integrated utility management and
14	capital planning to maximize energy conserva-
15	tion and efficiency measures."; and
16	(2) in subsection (e)(2)(C)—
17	(A) by striking "The" and inserting the
18	following:
19	"(i) In general.—The"; and
20	(B) by adding at the end the following:
21	"(ii) Third party contracts.—
22	Contracts described in clause (i) may in-
23	clude contracts for equipment conversions
24	to less costly utility sources, projects with
25	resident-paid utilities, and adjustments to

1	frozen base year consumption, including
2	systems repaired to meet applicable build-
3	ing and safety codes and adjustments for
4	occupancy rates increased by rehabilita-
5	tion.
6	"(iii) TERM OF CONTRACT.—The total
7	term of a contract described in clause (i)
8	shall not exceed 20 years to allow longer
9	payback periods for retrofits, including
10	windows, heating system replacements,
11	wall insulation, site-based generation, ad-
12	vanced energy savings technologies, includ-
13	ing renewable energy generation, and other
14	such retrofits.".
15	SEC. 402. GRANTS FOR ENERGY-CONSERVING IMPROVE-
16	MENTS FOR ASSISTED HOUSING.
17	Section 251(b)(1) of the National Energy Conserva-
18	tion Policy Act (42 U.S.C. 8231(1)) is amended—
19	(1) by striking "financed with loans" and in-
20	serting "assisted";
21	(2) by inserting after "1959," the following:
22	"which are eligible multifamily housing projects (as
23	such term is defined in section 512 of the Multi-
24	family Assisted Housing Reform and Affordability
25	Act of 1997 (42 U.S.C. 1437f note)) and are subject

1	to mortgage restructuring and rental assistance suffi-
2	ciency plans under such Act,"; and
3	(3) by inserting after the period at the end of
4	the first sentence the following new sentence: "Such
5	improvements may also include the installation of
6	energy and water conserving fixtures and fittings
7	that conform to the American Society of Mechanical
8	Engineers/American National Standards Institute
9	standards $A112.19.2-1998$ and $A112.18.1-2000$ , or
10	any revision thereto, applicable at the time of instal-
11	lation.".
12	SEC. 403. ENERGY-EFFICIENT APPLIANCES.
13	In purchasing appliances, a public housing agency
14	shall purchase energy-efficient appliances that are Energy
15	Star products or FEMP-designated products, as such
16	terms are defined in section 553 of the National Energy
17	Conservation Policy Act (as amended by this title), unless
18	the purchase of energy-efficient appliances is not cost-ef-
19	fective to the agency.
20	SEC. 404. ENERGY EFFICIENCY STANDARDS.
21	Section 109 of the Cranston-Gonzalez National Af-
22	fordable Housing Act (42 U.S.C. 12709) is amended—
23	(1) in subsection (a)—
24	(A) in paragraph (1)—

1	(i) by striking "1 year after the date
2	of the enactment of the Energy Policy Act
3	of 1992" and inserting "September 30,
4	2004";
5	(ii) in subparagraph (A), by striking
6	"and" at the end;
7	(iii) in subparagraph (B), by striking
8	the period at the end and inserting ";
9	and"; and
10	(iv) by adding at the end the fol-
11	lowing:
12	"(C) rehabilitation and new construction of
13	public and assisted housing funded by HOPE
14	VI revitalization grants under section 24 of the
15	United States Housing Act of 1937 (42 U.S.C.
16	1437v), where such standards are determined
17	to be cost effective by the Secretary of Housing
18	and Urban Development."; and
19	(B) in paragraph (2), by striking "Council
20	of American" and all that follows through
21	"90.1–1989')" and inserting "2003 Inter-
22	national Energy Conservation Code";
23	(2) in subsection (b)—
24	(A) by striking "within 1 year after the
25	date of the enactment of the Energy Policy Act

1	of 1992" and inserting "by September 30,
2	2004''; and
3	(B) by striking "CABO" and all that fol-
4	lows through "1989" and inserting "the 2003
5	International Energy Conservation Code"; and
6	(3) in subsection (c)—
7	(A) in the heading, by striking "MODEL
8	Energy Code" and inserting "The Inter-
9	NATIONAL ENERGY CONSERVATION CODE";
10	and
11	(B) by striking "CABO" and all that fol-
12	lows through "1989" and inserting "the 2003
13	International Energy Conservation Code".
14	TITLE V—RELIABILITY
15	STANDARDS
16	SEC. 501. ELECTRIC RELIABILITY STANDARDS.
17	(a) IN GENERAL.—Part II of the Federal Power Act
18	(16 U.S.C 824 et seq.) is amended by adding at the end
19	the following:
20	"SEC. 215. ELECTRIC RELIABILITY.
21	"(a) Definitions.—For purposes of this section:
22	"(1) The term 'bulk-power system' means—
23	"(A) facilities and control systems nec-
24	essary for operating an interconnected electric

1	energy	transmission	network	(or	any	portion
2	thereof)	; and				

- "(B) electric energy from generation facilities needed to maintain transmission system reliability.
- The term does not include facilities used in the local distribution of electric energy.
  - "(2) The terms 'Electric Reliability Organization' and 'ERO' mean the organization certified by the Commission under subsection (c) the purpose of which is to establish and enforce reliability standards for the bulk-power system, subject to Commission review.
  - "(3) The term 'reliability standard' means a requirement, approved by the Commission under this section, to provide for reliable operation of the bulk-power system. The term includes requirements for the operation of existing bulk-power system facilities and the design of planned additions or modifications to such facilities to the extent necessary to provide for reliable operation of the bulk-power system, but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity.

- "(4) The term 'reliable operation' means operating the elements of the bulk-power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance or unanticipated failure of system elements.
  - "(5) The term 'Interconnection' means a geographic area in which the operation of bulk-power system components is synchronized such that the failure of 1 or more of such components may adversely affect the ability of the operators of other components within the system to maintain reliable operation of the facilities within their control.
    - "(6) The term 'transmission organization' means a Regional Transmission Organization, Independent System Operator, independent transmission provider, or other transmission organization finally approved by the Commission for the operation of transmission facilities.
- 21 "(7) The term 'regional entity' means an entity 22 having enforcement authority pursuant to subsection 23 (e)(4).
- 24 "(b) Jurisdiction and Applicability.—(1) The 25 Commission shall have jurisdiction, within the United

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1	States, over the ERO certified by the Commission under
2	subsection (c), any regional entities, and all users, owners
3	and operators of the bulk-power system, including but not
4	limited to the entities described in section 201(f), for pur-
5	poses of approving reliability standards established under
6	this section and enforcing compliance with this section. All
7	users, owners and operators of the bulk-power system
8	shall comply with reliability standards that take effect
9	under this section.
10	"(2) The Commission shall issue a final rule to imple-
11	ment the requirements of this section not later than 180
12	days after the date of enactment of this section.
13	"(c) Certification.—Following the issuance of a
14	Commission rule under subsection $(b)(2)$ , any person may
15	submit an application to the Commission for certification
16	as the Electric Reliability Organization. The Commission
17	may certify 1 such ERO if the Commission determines
18	that such ERO—
19	"(1) has the ability to develop and enforce, sub-
20	ject to subsection (e)(2), reliability standards that
21	provide for an adequate level of reliability of the
22	bulk-power system; and
23	"(2) has established rules that—
24	"(A) assure its independence of the users
25	and owners and operators of the bulk-power

1	system, while assuring fair stakeholder rep-
2	resentation in the selection of its directors and
3	balanced decisionmaking in any ERO com-
4	mittee or subordinate organizational structure;
5	"(B) allocate equitably reasonable dues,
6	fees, and other charges among end users for all
7	activities under this section;
8	"(C) provide fair and impartial procedures
9	for enforcement of reliability standards through
10	the imposition of penalties in accordance with
11	subsection (e) (including limitations on activi-
12	ties, functions, or operations, or other appro-
13	priate sanctions);
14	"(D) provide for reasonable notice and op-
15	portunity for public comment, due process,
16	openness, and balance of interests in developing
17	reliability standards and otherwise exercising its
18	duties; and
19	"(E) provide for taking, after certification,
20	appropriate steps to gain recognition in Canada
21	and Mexico.
22	"(d) Reliability Standards.—(1) The Electric
23	Reliability Organization shall file each reliability standard
24	or modification to a reliability standard that it proposes

- 1 to be made effective under this section with the Commis-
- 2 sion.
- 3 "(2) The Commission may approve, by rule or order,
- 4 a proposed reliability standard or modification to a reli-
- 5 ability standard if it determines that the standard is just,
- 6 reasonable, not unduly discriminatory or preferential, and
- 7 in the public interest. The Commission shall give due
- 8 weight to the technical expertise of the Electric Reliability
- 9 Organization with respect to the content of a proposed
- 10 standard or modification to a reliability standard and to
- 11 the technical expertise of a regional entity organized on
- 12 an Interconnection-wide basis with respect to a reliability
- 13 standard to be applicable within that Interconnection, but
- 14 shall not defer with respect to the effect of a standard
- 15 on competition. A proposed standard or modification shall
- 16 take effect upon approval by the Commission.
- 17 "(3) The Electric Reliability Organization shall
- 18 rebuttably presume that a proposal from a regional entity
- 19 organized on an Interconnection-wide basis for a reliability
- 20 standard or modification to a reliability standard to be ap-
- 21 plicable on an Interconnection-wide basis is just, reason-
- 22 able, and not unduly discriminatory or preferential, and
- 23 in the public interest.
- 24 "(4) The Commission shall remand to the Electric
- 25 Reliability Organization for further consideration a pro-

1	posed reliability standard or a modification to a reliability
2	standard that the Commission disapproves in whole or in
3	part.
4	"(5) The Commission, upon its own motion or upon
5	complaint, may order the Electric Reliability Organization
6	to submit to the Commission a proposed reliability stand-
7	ard or a modification to a reliability standard that ad-
8	dresses a specific matter if the Commission considers such
9	a new or modified reliability standard appropriate to carry
10	out this section.
11	"(6) The final rule adopted under subsection (b)(2)
12	shall include fair processes for the identification and time-
13	ly resolution of any conflict between a reliability standard
14	and any function, rule, order, tariff, rate schedule, or
15	agreement accepted, approved, or ordered by the Commis-
16	sion applicable to a transmission organization. Such trans-
17	mission organization shall continue to comply with such
18	function, rule, order, tariff, rate schedule or agreement ac-
19	cepted approved, or ordered by the Commission until—
20	"(A) the Commission finds a conflict exists be-
21	tween a reliability standard and any such provision;
22	"(B) the Commission orders a change to such
23	provision pursuant to section 206 of this part; and
24	"(C) the ordered change becomes effective

under this part.

- 1 If the Commission determines that a reliability standard
- 2 needs to be changed as a result of such a conflict, it shall
- 3 order the ERO to develop and file with the Commission
- 4 a modified reliability standard under paragraph (4) or (5)
- 5 of this subsection.
- 6 "(e) Enforcement.—(1) The ERO may impose,
- 7 subject to paragraph (2), a penalty on a user or owner
- 8 or operator of the bulk-power system for a violation of a
- 9 reliability standard approved by the Commission under
- 10 subsection (d) if the ERO, after notice and an opportunity
- 11 for a hearing—
- 12 "(A) finds that the user or owner or operator
- has violated a reliability standard approved by the
- 14 Commission under subsection (d); and
- 15 "(B) files notice and the record of the pro-
- 16 ceeding with the Commission.
- 17 "(2) A penalty imposed under paragraph (1) may
- 18 take effect not earlier than the 31st day after the ERO
- 19 files with the Commission notice of the penalty and the
- 20 record of proceedings. Such penalty shall be subject to re-
- 21 view by the Commission, on its own motion or upon appli-
- 22 cation by the user, owner or operator that is the subject
- 23 of the penalty filed within 30 days after the date such
- 24 notice is filed with the Commission. Application to the
- 25 Commission for review, or the initiation of review by the

- 1 Commission on its own motion, shall not operate as a stay
- 2 of such penalty unless the Commission otherwise orders
- 3 upon its own motion or upon application by the user,
- 4 owner or operator that is the subject of such penalty. In
- 5 any proceeding to review a penalty imposed under para-
- 6 graph (1), the Commission, after notice and opportunity
- 7 for hearing (which hearing may consist solely of the record
- 8 before the ERO and opportunity for the presentation of
- 9 supporting reasons to affirm, modify, or set aside the pen-
- 10 alty), shall by order affirm, set aside, reinstate, or modify
- 11 the penalty, and, if appropriate, remand to the ERO for
- 12 further proceedings. The Commission shall implement ex-
- 13 pedited procedures for such hearings.
- 14 "(3) On its own motion or upon complaint, the Com-
- 15 mission may order compliance with a reliability standard
- 16 and may impose a penalty against a user or owner or oper-
- 17 ator of the bulk-power system if the Commission finds,
- 18 after notice and opportunity for a hearing, that the user
- 19 or owner or operator of the bulk-power system has en-
- 20 gaged or is about to engage in any acts or practices that
- 21 constitute or will constitute a violation of a reliability
- 22 standard.
- 23 "(4) The Commission shall issue regulations author-
- 24 izing the ERO to enter into an agreement to delegate au-
- 25 thority to a regional entity for the purpose of proposing

1	reliability standards to the ERO and enforcing reliability
2	standards under paragraph (1) if—
3	"(A) the regional entity is governed by—
4	"(i) an independent board;
5	"(ii) a balanced stakeholder board; or
6	"(iii) a combination independent and bal-
7	anced stakeholder board;
8	"(B) the regional entity otherwise satisfies the
9	provisions of subsection (c)(1) and (2); and
10	"(C) the agreement promotes effective and effi-
11	cient administration of bulk-power system reliability.
12	The Commission may modify such delegation. The ERO
13	and the Commission shall rebuttably presume that a pro-
14	posal for delegation to a regional entity organized on an
15	Interconnection-wide basis promotes effective and efficient
16	administration of bulk-power system reliability and should
17	be approved. Such regulation may provide that the Com-
18	mission may assign the ERO's authority to enforce reli-
19	ability standards under paragraph (1) directly to a re-
20	gional entity consistent with the requirements of this para-
21	graph.
22	"(5) The Commission may take such action as is nec-
23	essary or appropriate against the ERO or a regional entity
24	to ensure compliance with a reliability standard or any
25	Commission order affecting the ERO or a regional entity.

- 1 "(6) Any penalty imposed under this section shall
- 2 bear a reasonable relation to the seriousness of the viola-
- 3 tion and shall take into consideration the efforts of such
- 4 user, owner, or operator to remedy the violation in a time-
- 5 ly manner.
- 6 "(f) Changes in Electric Reliability Organiza-
- 7 TION RULES.—The Electric Reliability Organization shall
- 8 file with the Commission for approval any proposed rule
- 9 or proposed rule change, accompanied by an explanation
- 10 of its basis and purpose. The Commission, upon its own
- 11 motion or complaint, may propose a change to the rules
- 12 of the ERO. A proposed rule or proposed rule change shall
- 13 take effect upon a finding by the Commission, after notice
- 14 and opportunity for comment, that the change is just, rea-
- 15 sonable, not unduly discriminatory or preferential, is in
- 16 the public interest, and satisfies the requirements of sub-
- 17 section (c).
- 18 "(g) Reliability Reports.—The ERO shall con-
- 19 duct periodic assessments of the reliability and adequacy
- 20 of the bulk-power system in North America.
- 21 "(h) COORDINATION WITH CANADA AND MEXICO.—
- 22 The President is urged to negotiate international agree-
- 23 ments with the governments of Canada and Mexico to pro-
- 24 vide for effective compliance with reliability standards and

- 1 the effectiveness of the ERO in the United States and
- 2 Canada or Mexico.
- 3 "(i) Savings Provisions.—(1) The ERO shall have
- 4 authority to develop and enforce compliance with reli-
- 5 ability standards for only the bulk-power system.
- 6 "(2) This section does not authorize the ERO or the
- 7 Commission to order the construction of additional gen-
- 8 eration or transmission capacity or to set and enforce com-
- 9 pliance with standards for adequacy or safety of electric
- 10 facilities or services.
- 11 "(3) Nothing in this section shall be construed to pre-
- 12 empt any authority of any State to take action to ensure
- 13 the safety, adequacy, and reliability of electric service
- 14 within that State, as long as such action is not incon-
- 15 sistent with any reliability standard.
- 16 "(4) Within 90 days of the application of the Electric
- 17 Reliability Organization or other affected party, and after
- 18 notice and opportunity for comment, the Commission shall
- 19 issue a final order determining whether a State action is
- 20 inconsistent with a reliability standard, taking into consid-
- 21 eration any recommendation of the ERO.
- 22 "(5) The Commission, after consultation with the
- 23 ERO and the State taking action, may stay the effective-
- 24 ness of any State action, pending the Commission's
- 25 issuance of a final order.

- 1 "(j) Regional Advisory Bodies.—The Commis-
- 2 sion shall establish a regional advisory body on the petition
- 3 of at least ½ of the States within a region that have more
- 4 than ½ of their electric load served within the region. A
- 5 regional advisory body shall be composed of 1 member
- 6 from each participating State in the region, appointed by
- 7 the Governor of each State, and may include representa-
- 8 tives of agencies, States, and provinces outside the United
- 9 States. A regional advisory body may provide advice to the
- 10 Electric Reliability Organization, a regional entity, or the
- 11 Commission regarding the governance of an existing or
- 12 proposed regional entity within the same region, whether
- 13 a standard proposed to apply within the region is just,
- 14 reasonable, not unduly discriminatory or preferential, and
- 15 in the public interest, whether fees proposed to be assessed
- 16 within the region are just, reasonable, not unduly discrimi-
- 17 natory or preferential, and in the public interest and any
- 18 other responsibilities requested by the Commission. The
- 19 Commission may give deference to the advice of any such
- 20 regional advisory body if that body is organized on an
- 21 Interconnection-wide basis.
- 22 "(k) Alaska and Hawaii.—The provisions of this
- 23 section do not apply to Alaska or Hawaii.".
- 24 (b) Status of Ero.—The Electric Reliability Orga-
- 25 nization certified by the Federal Energy Regulatory Com-

- 1 mission under section 215(c) of the Federal Power Act
- 2 and any regional entity delegated enforcement authority
- 3 pursuant to section 215(e)(4) of that Act are not depart-
- 4 ments, agencies, or instrumentalities of the United States

5 Government.

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